Moroccan Agribusiness Employment Survey Project
Final Report

GENDER AND EMPLOYMENT IN MOROCCAN AGRIBUSINESS

VOLUME I

EXECUTIVE SUMMARY

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GENESYS

EXECUTIVE SUMMARY

The Moroccan Agribusiness Employment Survey, which occurred over one year, responds to concerns raised in the Social Soundness Analysis carried out for the Moroccan Agribusiness Promotion Project (MAPP).[1] Relatively low labor cost is an important factor in Morocco's comparative advantage in exporting agribusiness products. At the same time, additional employment and income generation are benefits sought through investment in this sector. To increase the productivity of agribusiness firms, information is needed about the employment characteristics of the firms and the factors affecting work performance of men and women employees. Women make up a large percentage of the semi-skilled and unskilled labor in the sector.

The study was funded by the Morocco USAID mission and the Office of Women in Development, USAID-Washington, under the auspices of the Gender in Economic and Social Systems (GENESYS) Project. The staff included two expatriate specialists in survey research and issues on women in development and a survey team from the Institut Agronomique et Vétérinaire Hassan II, which brought knowledge of the sector and of women seasonal workers in agribusiness. Data on employee characteristics and factors affecting employment generation and productivity were drawn from a survey of a sample of agribusiness firms and another survey of their employees. The two surveys were supplemented with 41 in-depth employee interviews to assist in interpreting the employee questionnaire.

The primary objective of the study was to prepare baseline data on employment and employment-related factors to enable the Government of Morocco and USAID to assess the impact of agribusiness promotion on employment generation and work performance, with particular attention to differences by gender. Interviews with firm directors or managers provide an overview of work force composition in various types of firms, managers' assessment of factors affecting employee performance, and managers' assessment of employment benefits. The employee survey provides a detailed profile of employees at various levels in the organization, focusing especially on the unskilled and semi-skilled workers, permanent and seasonal, who make up 75 percent of the sectoral work force. It includes demographic characteristics as well as the employees' assessment of factors affecting their job performance. The in-depth interviews (case studies) examine individual motivational factors and constraints to productivity and employment, as well as the impact of employment on the lives of workers, particularly women.

This summary draws on the detailed reports from the three studies to sort out common themes and indicate directions for use of the findings and additional research. The analysis of the three data sets is presented in a series of four technical documents:

- An analysis of the enterprise-level survey of agribusiness firms, by Suzanne Saulniers;
- An analysis of the survey of employees of agribusiness firms, by Philip Boyle;
- An analysis of the case studies, by Maria Neyra Faqir; and
- A description of the research design and methodology, by Suzanne Saulniers.

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[1] The Morocco Agribusiness Promotion Project (608-0210), a seven-year US$20 million project, is designed to directly help the Government of Morocco and private sector agribusinesses produce, package, and market a wide variety of demand-driven value-added agricultural commodities.

The author of each technical report also makes recommendations specific to that part of the study.

FORMAT

The study examines institutional and employee characteristics in the major types of post-harvest handling industries of the horticultural export subsector. The principal post-harvest handling units in the study are processing and packing, since these activities employ large numbers of people.[2] A total of 59 firms and 847 employees were surveyed between January and March 1993. The 41 in-depth case study interviews were done in May and June 1993.

Sample of Firms

A multistage cluster methodology was used to select a nationally representative sample of post-harvest horticultural firms. Firms producing for both the export and the national markets were included. Table 1 shows the distribution of the firms included in the sample by region, activity, and commodity.

TABLE 1

DISTRIBUTION OF SAMPLED FIRMS BY REGION AND PRINCIPAL ECONOMIC ACTIVITY

Region	Number of Firms	Processing				Packing			Storage
		Fruit & Veg	Olives & Oil	Spices	Wine	Citrus	Primeurs	Flowers	
Larache	1	1	0	0	0	0	0	0	0
Berkane	4	0	0	1	0	3	0	0	0
Casablanca	13	1	2	1	1	2	3	1	2
Meknes	5	1	1	0	2	0	0	0	1
Agadir	17	0	0	0	0	4	11	2	0
Fez	6	0	6	0	0	0	0	0	0
Marrakech	13	3	7	0	0	1	0	2	0
TOTAL	59	6	16	2	3	10	14	5	3

[2] Fruit and vegetable cold storage also is included but is de-emphasized because the Ministry of Agriculture and Agrarian Reform was engaged in a national study of cold storage at the time of this study. Cold storage firms in the sample were combined with packing firms in the analysis of the employee survey.

The three criteria for the clusters were region, post-harvest activity (storage, packaging, or processing), and products handled. Regions were selected on the basis of diversity of post-harvest activities and number of firms. The regions sampled were Berkane (Moulouya), Meknes, Fez, Larache (Loukkos), Casablanca, Marrakech (Haouz), and Agadir (Souss-Massa). The two activity clusters examined were processing and packing or storage. Product clustering was done to correspond to the MAPP priority crops (fresh and processed fruits and vegetables, spices and essential oils, olives, early season vegetables and fruits (*primeurs*), cut flowers, and wine).

Although the survey covers the same commodities as MAPP, the project takes a vertical subsector approach to analysis of commodities, covering activities from production through marketing, whereas the survey includes only firms in the post-harvest processing and packing industries. Given funding and time limitations, the decision was made to survey employment horizontally, at the point where value added is most crucial and where MAPP will place the majority of its technical assistance.

Employee Sample

The sample of employees to be interviewed from each firm was selected at the time of the firm-level interview with the manager or director.[3] The sample was designed so that proportionately fewer employees were drawn from large firms (200 or more employees) than from medium (50 to 199 employees) and small (fewer than 50 employees) firms. The sampling population included all employees, and positions were sampled in proportion to their number in the firm. However, positions were identified functionally rather than by job title, so, in comparisons across firms, some categories may include diverse job descriptions. Because these are self-identified categories, employees who call themselves "workers" are probably unskilled. This category makes up 75 percent of the sample. Position labels in the employee survey are not directly comparable to those used by directors at the firm level.

Distribution of the sample by type of firm, position, and sex of employee is shown in Table 2. Survey respondents are fairly evenly divided between the packing and processing industries: 53 percent from packing and 47 percent from processing. Fifty-seven percent of those interviewed are women. Women constitute 59 percent of all employees in the packing industry and 54 percent in processing. The validity of the sample is confirmed by the similarity of the distribution of the sample to the distribution of employees reported in the firm-level questionnaire.

[3] Employees were interviewed from 58 of the 59 firms included in the firm-level sample.

TABLE 2

DISTRIBUTION OF EMPLOYEE SAMPLE
BY TYPE OF FIRM, POSITION, AND SEX

TYPE OF FIRM	POSITION							TOTAL
	Plant Manager	Floor Manager	Secretary	Supervisor	Foreman	Worker	Other	
Packing/ Storage	4	19	6	10	9	372	31	451
Processing	4	18	22	13	10	267	62	396
Male	6	33	4	18	16	210	79	366
Female	2	4	24	5	3	429	14	481
TOTAL	8	37	28	23	19	639	93	847

Case Study Sample

The 41 people selected for in-depth interviews included 26 female and 5 male unskilled workers, 5 supervisors, and 5 directors, from two processing firms in Marrakech (olives, spices, and apricots) and three packing stations for early vegetables in Agadir.

PATTERNS OF EMPLOYMENT IN THE POST-HARVEST HORTICULTURAL SECTOR

One mandate for the study was to gather baseline data on employment in the sector and identify characteristics that should be monitored during implementation of MAPP. Both the firm-level survey and the employee survey include information relevant to this task. In the 59 firm-level interviews, managers were asked to specify the number of male and female employees during the 1991-1992 season by job category (directors, administrative cadre,[4] technical cadre, personnel, permanent skilled and unskilled workers, and seasonal skilled and unskilled workers).

Work Force Composition

Most of the people working in post-harvest horticulture are women. Based on the firm-level survey, 61 percent of all employees are women. The proportion of women is highest in firms processing spices and condiments (73 percent) and is exceptionally low in wine processing (9 percent). In the other

[4] In the survey, "cadre" refers to professionals in executive or high-level administrative and technical advisory positions.

subsectors, 58 to 73 percent of the work force is female.) Ninety-six percent of the women employed in the post-harvest horticultural sector are unskilled workers, and 88 percent are seasonal employees.

In general, women work as unskilled workers and men predominate in staff positions. Across subsectors, 84 percent of the employees are unskilled workers. Seventy percent of the unskilled workers are women, compared with 24 percent of the staff. Most (83 percent) of the women in staff positions work in Personnel. The case study interviews suggest that this division of labor by gender is cultural as well as economic. The case study report concludes that "even if it is acceptable for women to have access to management positions in the firm, through specialized training, it is also voluntarily admitted that women are not made for handling heavy goods or for supervising personnel: 'It's a man's job because they are more authoritarian.' 'They know how to enforce orders.'"[5]

Seasonality of Employment

A second important characteristic of employment in the sector is the preponderance of seasonal employees. Across the sample of firms, 75 percent of the employees are seasonal and 72 percent of the seasonal employees are women. Almost all (95 percent) of the seasonal employees are unskilled workers. The proportion of seasonal employees is much lower in olive and olive oil processing and wine processing firms (26 percent and 24 percent, respectively) than in others. In olive processing, 90 percent of the employees are unskilled but they tend to be hired year-round. In wine processing, only about one-fourth of the work force is classified as unskilled.

Men and women are hired for different types of unskilled jobs. Female employees are usually devoted to manual tasks of sorting, grading, and packing. The case study interviews asked about the appropriateness of the sexual segregation among seasonal workers. Both male and female employees suggest that women have an inborn intuition for this work. Furthermore, employees are against mixing male and female workers on the same production line. Managers interviewed are less fixed in their stereotypes than the workers are and express less need to separate the sexes on the production line.

The firm-level data confirm that men and women operate in different labor markets for seasonal employment, with different peak demand periods. The demands for seasonal labor also vary by commodity and region. In spite of these variations, the data give little indication of workers moving to other regions or firms to work in the off-season. Only 9 percent of the women and 6 percent of the men seasonal workers employed in the off-season reported off-season work with another horticultural firm.

The presence of segregation by sex is important for two reasons. First, the differences in men's and women's jobs are translated into differences in pay throughout the sector. Second, although directors report no problems with hiring even at peak periods, shifts in labor demand will need to take account of a potential labor crunch that could occur regionally for men or women during peak months.

Recruitment

Multiple methods are used to recruit workers. Slightly more than one-half the firms hire male seasonal workers from returning workers, and one-third hire male permanent workers from persons

[5] Maria Neyra Faqir, "Factors Affecting Employment and Productivity of Male and Female Employees in the Post-Harvest Horticultural Export Sector," November 1993.

showing up at the gate. Female permanent and seasonal workers are usually hired from those who come to the gate. The prevalence of these methods reflects both a labor surplus for this type of employment and the fact that the labor force is not specialized. If technical requirements change, recruitment methods may have to be adjusted.

According to the employee survey, there is a high rate of return of workers from one season to the next, and the case studies show that employees tend to work within walking distance of their homes. In addition, even unskilled workers require some training (a week or more on the job) in the way a particular firm operates, and employers benefit by rehiring people they know. The case studies show, for example, that even seasonal employees feel confident they will be rehired after sick leave.

Implications

The generalizations about work force composition raise two points. The work in this sector is clearly labor-intensive and is basically unskilled. The ratio of unskilled workers to technical personnel is more than 300:1 in olive and olive oil processing and spice processing firms, with an average range across all subsectors of 76:1. This low level of supervision is probably a reflection of the routine nature of the work. Again, wine processing is the exception, with a ratio of 9:1 of unskilled workers per technical employee.

Both numerically and proportionately, there are few women in the staff positions (less than 10 percent, except in Personnel), and according to the Ministère de l'Equipement de la Formation Professionnelle et de la Formation des Cadres, few women are being trained for these positions. In 1989-1990, only 629 women (2.3 percent of the students) received professional training in agriculture, and women constituted only 7.7 percent of students in commerce and services. Staff positions are the better jobs in the sector, and, from an equity point of view, USAID might seek to encourage more balance. Having women in these positions also may have an impact on productivity, because the work force being supervised is predominantly female. One of the motivating factors cited by employees in the survey and in the case studies is the possibility of promotion -- from seasonal to permanent employment and from workers to supervisors.

The firm-level and sectoral characteristics affecting labor force composition in terms of worker-to-staff ratio and the preference for permanent or seasonal workers deserve attention. What kinds of changes will be expected in the work force as the sector matures? This report shows variation by subsector, reflecting differences in nature of products and tasks. Adoption of new technology will affect labor demands. Other factors that can be analyzed with this data set include:

- Number and types of products produced (because few firms process only one commodity, labor demands and constraints need to be analyzed across all commodities);
- Reliability of raw product sources (data in the survey suggest that firms with guaranteed sources are better able to commit themselves to permanent workers);
- Size of firm, which affects particularly the worker-to-supervisor ratio and adoption of technology;
- Regional variations; and
- Idiosyncratic differences because of managerial styles.

EMPLOYEE CHARACTERISTICS

The Employee Survey provides a detailed examination of the demographic characteristics of the sector's work force. Overall, the employees in the sector tend to be female, middle-aged, and single. Unskilled workers have minimal or no formal education, are the principal source of support for their families, and have not changed residence to take employment. Even seasonal workers tend to return to the same firm year after year. Some seasonal workers have another job during the off-season, but women are less likely to find other work than are men. The seasonal job in the post-harvest horticultural sector is the main source of household income. Across the board, male employees earn more than female employees.

In the sample, 59 percent of all employees are seasonal and 57 percent are female. Among the unskilled workers interviewed, 73 percent are seasonal and 67 percent are female. Women constituted 70 percent of the seasonal workers in the survey.

Seasonal employees are far more common in the packing industry than in processing, but there is little difference in share of males and females in the sample. The proportion of unskilled workers among employees varies significantly between the two industries and largely explains the variation in permanent or seasonal status. Thus, 82 percent of those interviewed in packing firms were unskilled workers, but only 67 percent in processing were unskilled workers. About two-thirds of the unskilled workers questioned in each group of firms were women.

Age

Most employees are in middle age, although packing firms tend to employ a larger proportion of younger employees than do those in processing. Thus, nearly one-half of all employees are age 30 or younger in packing, while in processing only a one-third fall into this group. On the other hand, the packing industry counts only 18 percent of its employees older than age 45, compared with 25 percent in processing. The prevalence of middle-aged workers may reflect the overall stability in the work force.

Migration

Employment possibilities in the sector have affected population distribution through permanent rather than temporary migration. In the case study interviews, workers reported moving their entire households from areas with little opportunity for employment to Marrakech or Agadir. Overall, employees demonstrate both a high degree of migration from their birthplaces and considerable residential stability over the medium to long term. Some 96 percent of all respondents are not native to the province in which they now reside and work. On the other hand, 87 percent of employees report but one residence over the preceding 10 years. For the sample as a whole, plants seem to hire locally. Only 18 percent of those surveyed changed residence to take their current jobs. All these trends show little or no difference by sex or permanent and seasonal employment status, although there may be important regional variations.

Marital Status

Most permanent and seasonal employees (57 percent) in post-harvest horticulture are single: 35 percent have not yet married, 11 percent are divorced, 10 percent widowed, and 1 percent married but separated. There are strong gender-linked differences, however. Two-thirds (67 percent) of male employees are married and living with their spouses; less than one-fourth (23 percent) of females are in this status.

The contrast between seasonal and permanent employees is important. The highest proportion of single employees is found among female seasonal employees (79 percent), and nearly one-half (40 percent) of this group is single because they are divorced, widowed, or separated — meaning they are likely to have dependents. Among female permanent employees, 71 percent are single but only 23 percent of this group have been married. Among male employees, seasonal workers also are more likely to be single (44 percent) than are permanent employees (23 percent).

These comparisons mean that the category of workers with the lowest pay and the least access to benefits — female seasonal workers — is the most likely to be supporting children. Excluding all persons never married, employees report an average of 2.9 living children. On average, male employees have more children than do females. In the case studies, most women interviewed expressed a desire for a small family, in large part because of the difficulty of supporting a family.

Education

The level of formal education in the work force is very low, placing boundaries on the kinds of training programs that can be developed and limiting employees' options for finding well-paid employment elsewhere. Nearly half (48 percent) of the employees have never attended any form of school. This proportion rises to 59 percent for the worker group: 38 percent for males and 70 percent for females. Among permanent employees, 32 percent have never been to school; among seasonals, the figure is nearly twice as high — 58 percent.

Female unskilled workers have the lowest levels of education of all groups: 70 percent have never been to any form of school and only 9 percent have gone beyond primary school. No female worker has gone beyond secondary school (four males have done so).

Income

Earnings are not equal between male and female workers — permanent or seasonal. Combining workers paid by the hour, by the day, and by the month, it appears that male seasonals make about 21 percent more per day than female seasonals. The difference rises to 28 percent among permanents. Given their lower salary level, a possible tendency to work fewer days during the year for the main firm, and greater frequency of unemployment during the off-season, it is not surprising that female seasonal workers earn 49 percent less during the year from agribusiness firms than do their male colleagues.

Those workers paid an hourly wage receive an average of DH 6.3 (about $0.70). Based on average hours per day and days per month, this wage translates to about DH 1,325 ($147) per month. Workers paid on a monthly basis earn slightly more than this, while workers paid on a daily basis (26 percent of all workers) earn about one-third less. Comparing all salaries by converting them to a common daily wage, it can be seen that, overall, workers earn an average daily wage of about DH 48

($5.33). Permanent workers earn somewhat more than seasonals, and, among both permanent and seasonal workers, males earn more on average than females.

Annual income of all workers is DH 12,440 ($1,382) — DH 11,195 ($1,244) from the principal firm and, for seasonal workers, an additional DH 1,360 ($151) from other firms during the year. The average permanent worker makes DH 18,365 ($2,040) per year all from one source; the seasonal worker, largely due to the substantially shorter work season, earns only DH 10,530 ($1,170), including an average of DH 1,830 ($203) from other firms during the year. This is the equivalent for seasonal workers of an additional 34 days of work outside their present firms. Seasonal workers, moreover, always earn less than their permanent counterparts — 36 percent less than permanents in packing and 45 percent less than permanents in processing.[6]

Use of Income

The income earned by women in these jobs is not pocket money. Overall, unskilled workers claim to provide 79 percent of total household income, a figure rising to 88 percent for permanents. Three-fourths of the women interviewed for the case studies said that all of their income from this work goes to their families. Family dependence on male seasonal income appears to be even higher. On the other hand, nearly one-half (48 percent) of the workers in the employee survey maintain that their salary does not even meet basic food needs for their families. Female seasonals were least secure in covering basic food needs, male permanents most confident.

The case studies also explore whether women control how their earnings are spent. In general, women say they control what they earn and, furthermore, earning income increases their role in household decision making. This generalization applies both to married women and to divorced women living with their parents. Young never-married women living at home often have to turn over more than 50 percent of their earnings to their parents.

When asked whether they would continue working if they remarried, about one-half the women voice the traditional view that a married man should support his family. At the same time, the experience in the work force and of earning money seems to be breaking down this stereotype, particularly among young single women, some of whom said that they could continue working if they married and that they would if their husbands were not paid enough to support them.

Work Experience

This is an experienced work force. Total experience in the horticultural sector for permanent and seasonal workers includes seniority with the present firm and previous experience of a similar nature in related firms. Overall, permanent workers have more total experience than seasonal workers. Male permanents average 11 years of service, while female seasonals have the least, 8 years.

In addition to their principal employment in post-harvest horticulture, to which many return every year, seasonal workers tend to have another major activity in the off-season, although 39 percent are unemployed during this period. The proportion of females unemployed in the off-season is nearly 2.5 times greater than that for males.

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[6] The averages vary by region and length of season.

For those employed in the off-season, in addition to the few who worked in other horticultural firms, agriculture was an option for both men (19 percent) and women (10 percent). For women, 14 percent worked in domestic service, while 15 percent of the men were "in business." On a national basis, there is no clear pattern of balance for seasonal workers between this work and other seasonal tasks (for example, working in packing in Agadir and shifting to construction work in Rabat), although this type of trade-off may constrain labor force expansion on a regional level.

Seniority of employees in their present positions differs between the packing and processing industries. Seasonal employees in packing have an average total seniority of 43 months, which means they have returned each season for the preceding six or seven years. On the other hand, permanent employees in the packing industry indicate the least seniority of all groups, with only 13 months in their present posts. These seniorities can be compared with those in processing: permanent employees have 35 months of seniority and seasonals 20 months.

Both the employee survey and the case studies confirm the reports of firm directors that most people are hired from those who show up at the gate. The case studies, which included only people who had worked for several years in the sector, note that workers and supervisors get to know each other over time, so that there is a tendency to go back to and be rehired in the same firm.[7]

Factors Affecting Worker Performance

A second important mandate for the study was to identify factors that influence job performance or productivity. The firm-level and employee-level surveys offer insights on incentives and constraints, from both the employer and the employee points of view. Four sets of factors were investigated:

- Indicators of worker performance;
- Terms of evaluation of performance;
- Work conditions related to job performance and satisfaction; and
- Employment benefits.

Indicators of Performance

Managers were asked about the level of turnover and the amount of absenteeism in their work force. Neither of the questions yielded reliable data that can be compared over time by firm, but the comparisons across categories are interesting. Employers report no difference between men and women in the proportion of new employees by position category. The turnover of unskilled workers is much higher than for other groups. In general, the information from the managers seems to confirm the relative stability of the work force within each firm and particularly in the sector. What factors explain

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[7] This tendency is not confirmed in the employee survey. This discrepancy could be because of the idiosyncracies of the workers included in the case studies or because of the question construction in the survey -- that is, people replied that they are hired because they show up at the gate, but the survey did not ask whether they always show up at the same gate.

differences in turnover among firms? Are there variations by structural factors such as size, subsector, region, or level of supervision or are they explained by individual job satisfaction?

The managers' report on absenteeism is valid only as a reflection of their perception of the reliability of the work force, because records are not usually kept on absenteeism. Overall, managers perceive that men are absent more often than women, except among seasonal workers, where they see no difference. This perception is roughly in line with the level of absenteeism reported by the employees themselves in the employee survey. Workers miss about 13 days of work on average each year (excluding 20 days of paid leave for permanent workers only). Sick days explain about one-half of this absenteeism. Permanent workers take nearly twice as many sick days off as do seasonals, although this is in proportion to their longer period of employment each year.

Males tend to take more time off than do females. Male permanents take 50 percent more leave than females, while male seasonal workers take 67 percent more time off than their female counterparts. Men report taking more days off than women for job seeking. The difference between men and women is somewhat surprising because, stereotypically, women are perceived as less reliable employees than men because of childcare and household responsibilities. To some extent, the difference in this group of employees may be a reflection of the largely single status of the work force. At the same time, many of the single women working as seasonal employees are divorced or widowed. The case study interviews asked women whether household and childcare responsibilities are constraints to their work. They report that, although they retain this responsibility, it does not interfere with employment because their mothers, older daughters, or sisters look after the children while they work.[8]

Terms for Evaluation of Performance

The firm-level survey shows that, in general, managers give little importance to human resource management. Although 86 percent of the firms say they evaluate their employees, evaluation criteria tend to be vaguely defined and to vary considerably across categories. For evaluating performance of seasonal workers, 60 percent of the firms used the number of end products per time unit, but only 36 percent used this measure for evaluating permanent workers. The criterion most often used for evaluating administrative and personnel staff is "not asking questions or making requests," and it is not clear what criteria are used for evaluating technical cadre and directors.

Seventy-three percent of the firms said that they reward good performance, primarily with bonuses (60 percent), salary increases (16 percent), or access to credit (5 percent).[9] None reported rewarding worker performance with promotions.

The employees' self-evaluation of work performance mirrors the standards used by their employers. More than one-half of all workers consider achieving satisfactory output as most important in measuring job performance. Female and seasonal workers are stronger in their appreciation of this measure than are males and permanents. Less than one-fifth of workers consider professional behavior an important means of gauging work performance, while only one in 10 felt that efficiency and speed of doing one's work is an important indicator of successful performance. Although permanent and seasonal

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[8] This pattern of extended family support for unskilled women workers in the labor force has been reported in other countries as well. The extended family, in turn, depends on the worker for cash income.

[9] Firms may use more than one type of reward.

workers differed little in their appreciation of these factors, men value these two measures of work performance more than women do.

More than one-fifth of workers, particularly females, are incapable of providing a measure, subjective or objective, by which they may judge their job performance. The case studies confirm that workers lack a common concept of productivity. For most, being productive means "working hard." An objective sense of individual productivity is particularly difficult to define for individuals who work as part of a group on a production line. Being a "good worker" is often equated with experience on the job.

The supervisors interviewed in the case studies also report varied qualitative and quantitative measures of work performance (such as number of crates or working hours, and satisfaction of superiors). The criteria for judging performance of the group of workers are often speed and experience. Although supervisors find it difficult to distinguish between individuals on a production line, with time they can distinguish good and bad workers. Those who are quick and do a quality job are often those who have been employed for some time in the firm.

Conditions Affecting Work Performance

There is a consistent pattern across the three sets of interviews in the factors important for enhancing job performance. Employers and employees agree that the principal motivating factor for this employment is earnings. Bonuses and promotions that bring salary increases are the key ways to encourage and reward good performance. Improved working conditions, both physical and social, may make the work more pleasant and therefore affect productivity, but the bottom line is earnings and employment.

Employers were asked to evaluate the importance of and rank 19 individual, social, physical, and institutional factors that affect worker motivation.[10] Most directors have an individualistic orientation toward workers, rather than seeing workers as affected by conditions of the work place and its physical environment. The three factors most often cited by directors are "individual bonuses" (91 percent of directors), "good relations with the boss" (91 percent), and "better wages" (79 percent). The factor ranked lowest by directors is "making family planning services available." When selecting the three most important factors, "better wages" is cited most, followed by "individual bonuses."

Among the situational factors, "lighting and air ventilation" is most important. Seventy percent consider this a factor in enhancing worker productivity. Only 32 percent regard "separation of tasks by gender of employee" as an important factor influencing worker motivation, but two-thirds of the directors consider the factors "pensions" and "insurance" important for workers.

Employees were asked a series of questions relevant to this issue. First, they ranked 11 factors that may be related to job satisfaction. Of the four top-rated motivating factors for workers, a salary

[10] The factors are individual bonuses, good relations with the boss, better wages, possibility of career advancement, better lighting and air ventilation, pension, friendly relations among workers, insurance, emergency medical services, credit and savings options, adjustments of hours and breaks, provision of transport to and from work, maternity leave, restaurant or foyer for eating at the firm, separation of tasks by gender of worker, health insurance for children, bonuses to work groups, day care services for workers' children, and family planning services.

meeting more than basic needs is by far the most popular. Some 96 percent of all workers rate this issue as important. Second in importance is the opportunity to advance one's career and increase salary level. Nearly as many workers consider this an important issue, partly because the notion of salary advance is included in the issue of career advancement. Female seasonal workers value this factor least of all groups, reflecting the limited options they have for moving up a job ladder.

Other factors fall far below these in rating as top issues, although many workers consider them important. Employer-provided insurance is felt to be important by 95 percent of workers — permanent and seasonal male and female workers — although it received few top rankings. Credit and a savings plan is fourth in perceived importance by workers, with 75 percent of workers considering it important in motivating them. Permanent workers place greater importance on this issue than do seasonals.

Employees, like employers, give low rankings to basic health services such as maternity leave, favored more by female workers; family planning services, favored more by seasonal workers; child care at the work site, favored more by seasonal and female workers; and child health services, favored more by seasonal and male workers.

Employees also were asked to evaluate 10 factors that may facilitate their work or comfort and to select the three most important. The four most salient factors, according to workers, are work rhythm (cadence), safety of equipment used, supervisors' instructions, and a seated work position. Overall, work rhythm is rated the top issue by the greatest number of respondents. The tendency for female workers to place greater value on work rhythm than do males is probably related to the less specialized, more routine nature of much of their work.

Although rated less often as the most important issue enhancing work performance, 78 percent of workers consider safety of equipment an important issue. Seasonal and female workers tend to place greater importance on this factor than do permanent workers and males, reflecting their greater exposure to machinery.

Third in priority are clarity and appropriateness of supervisors' instructions; 70 percent of all workers consider this an important factor in facilitating work performance. Female seasonal workers place the greatest emphasis on this issue, because of the speed with which operations have to be carried out on the line.

Similar themes emerged from the case study interviews: for worker motivation, the main factors are the need to earn a wage and a good atmosphere at work. ("The employers are good." "Good relationships with colleagues mean that time goes by very quickly.") Most employees would prefer cash incentives (bonuses) as a reward for performance, but there is also a desire for recognition of a job well done. Moreover, a sizable proportion of workers prefers collective incentives.

Overall, for the male and female workers interviewed in the case studies, the main productivity constraints are personal. For them, working conditions are difficult but do not prevent them from working. The principal work-related factors cited are lack of bonuses, little possibility of promotion (especially a change in status from seasonal to permanent), and tiredness (mentioned by female employees).

Benefits Provided

The rankings of motivating factors for workers show that benefits provided by employers are perceived as relatively unimportant to work performance. In part, these rankings may reflect the fact that few firms offer benefits. Overall, only a small minority of employees receives benefits, except for accidental injury insurance, first aid at the work place, and a retirement plan.

According to firm-level interviews, of the 59 firms surveyed, 73 percent provide maternity and paternity leaves for their employees. Only three firms provide day-care services for children of staff employees; one provides a day-care center for children of permanent workers; and only two provide day-care centers for seasonal workers' children. In spite of the fact that many seasonal workers return to the same firm year after year, employers are not legally required to provide services for temporary employees, and, as a result, seasonal workers receive fewer benefits than permanent workers.

A few of the firms have credit programs for their employees, and access to credit is sometimes used as a reward for performance. About one-fourth of the workers receive credit from their employers over the course of the year. Permanent workers and males benefit disproportionately from this facility. The average amount of credit received by these workers during the year is DH 2,100 ($233), or about 159 percent of one month's average salary. Permanent workers receive nearly twice the amount that seasonals receive, in part because of their longer period of employment. Among permanent workers, males receive more than three times the amount received by females; among seasonals, males receive nearly four times the sum granted to females.

Of the 13 common insurance and health benefits employers might provide to their employees, only three are provided to more than one-half the workers: first aid services at the work place (79 percent of employees), emergency medical assistance (64 percent), and accidental injury insurance (61 percent). Four other benefits are now provided to between 25 percent and 36 percent of workers: a retirement or pension plan (36 percent), access to maternity or paternity leave (32 percent), a medical doctor at the work place (25 percent), and partial reimbursement of medical expenses outside the work place (25 percent).

Other benefits provided to some workers by their employers are adult vaccination services (17 percent), health insurance coverage (16 percent), a medical examination prior to beginning work (11 percent), life or permanent disability insurance (9 percent), family planning services (nil), and child vaccination services (none reported).[11] In general, permanent workers and males appear to enjoy these benefits considerably more than seasonals and females. The large group of female seasonal workers is usually the least covered by these employer-provided benefits.

Directors say that training is important for improving worker performance, and nearly 77 percent provide training for new recruits. Only 21 percent now provide skills upgrading or continuous training, although 84 percent of the directors favor a system of continuous employee training. In the case study interviews, managers expressed an interest in training so that workers would understand the demands of the market for quality control and calibration and therefore would be more effective workers. Managers also recognize that illiteracy and lack of education are constraints in training.

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[11] The low level of interest expressed for family planning services may reflect the cultural inappropriateness of expressing interest in such services when single.

On the other hand, few employees report having received formal training. New entry training for workers is always on-the-job training. While one of five workers expresses a desire for such training, permanent and male workers value this prospect more than seasonal and female workers. The latter groups' lack of interest may reflect that under the present circumstances there is little possibility of a link between training and increased earnings or promotion for these workers.

With respect to labor representation, 14 firms have labor unions and 7 have personnel delegates. When labor unions do exist, they tend to be active and cover not only wages but also working and social conditions. Female seasonal workers are those least likely to belong to a union at the work place. Only one in ten female seasonal workers is a union member, compared with nearly one in five male seasonal workers.

CONCLUSIONS

The firms included in the sample vary in size, degree of mechanization, and regional location. They represent eight subsectors and two major activities — packing and processing — within the post-harvest horticultural sector. Many firms engage in multiple activities and products.

Low labor costs are an important factor in Morocco's competitive position in world export markets. Improved productivity of the labor force may be key to maintaining this advantage, particularly in the face of structural changes and increasing mechanization that will affect labor force composition. Over the long run, increasing the skills of the labor force, now overwhelmingly without specialized training or even basic formal education, may be essential.

Basic education skills, such as functional literacy and numeracy, combined with training in work-related skills, should have immediate impact on the motivation and performance of the work force and should provide a growing cohort of workers to fill the increasingly technical work roles required in the future. Employer-provided services and benefits also are important in building a loyal and productive work force.

By monitoring changes in the composition of the work force and documenting factors that affect productivity, this study can assist firms in designing effective programs of personnel management. The study shows both that the firms enjoy the luxury of a surplus of unskilled labor and that workers and their families are very dependent on income from this employment. At this point, potentially costly benefits provided by firms are considered relatively unimportant by employees, particularly seasonal workers, who are much more concerned with earnings and continued employment. Today, few firms offer benefits beyond those mandated by law. Managers will have to continually assess the trade-off between the costs of increased benefits and the pay-off in quality of labor. What types of firms will be financially capable of providing the benefits and realizing the pay-offs?

Changes in the labor requirements, particularly as they affect the large seasonal work force, will have social and economic ramifications throughout the country. The study documents the high level of dependence on income from the sector even though most of the work force is seasonal and temporary. The principal motivating factors for the employees are earnings and the possibility of job security.

Work in this sector also enhances social standing. Workers reported that their employment is well perceived by their close friends and neighbors. For divorcees, being in paid employment enables them to be better accepted in their social circle, and married women say their jobs are not detrimental to their

15

marriages. Because of the low levels of education, women working in seasonal jobs have few other options for earning income.

At the same time, there are signs of worker dissatisfaction and indications of the need for firms to be more responsive to employees. When employees were asked whether they would like their children to work in the same type of job, only about 10 percent felt their work would be appropriate for their sons or daughters. Differences between permanent and seasonal employees are small, as are the differences in the appraisal for sons and daughters. Workers report that the working conditions are difficult and they are often tired. Most of the work force — the seasonal unskilled workers — receive few benefits in spite of the fact that many of them work nearly year-round in the sector. Continued growth and development in the sector at the expense of these workers is probably not sustainable.

RECOMMENDATIONS

Each technical report includes recommendations specific to its analysis. These recommendations fall into three broad categories: recommendations for the firms and the sector; recommendations for USAID and MAPP; and recommendations on the methodology in follow-up surveys and additional analysis.

The authors of the technical reports agree on several recommendations for firms in the sector. First, firms need to give more attention to personnel management. The labor intensive nature of the sector activities requires specific analysis of the increased productivity and commitment resulting from investment in employee development. Labor management needs to be built into the firms' development planning.

Second, on a more specific level, there is a need to develop objective and open standards for judging employee performance and rewarding employees who perform well. The present system is subjective, personalistic, and little understood, particularly by the unskilled seasonal workers. Although they seek increased earnings and promotions, they have little hope of achieving any increases beyond changes in the minimum wage. Building job ladders for workers and possibilities for advancement from seasonal to permanent worker, from line worker to supervisor, would provide real incentives for work performance. At the same time, it could be a step toward breaking down some of the sector's occupational sex segregation that places women at a considerable disadvantage in terms of earnings, status, authority, and security.

Third, the need for training for the large unskilled and illiterate work force is a theme in all reports. Training is required to permit this work force to adjust with the firms to changing technologies and the demands of world markets. Training also may be a tool for moving more women into staff positions in the sector and for building job ladders for the workers.

Recommendations for USAID and MAPP are of two types. First, the findings show a clear possibility for USAID to provide technical assistance to the firms in personnel management. Other USAID projects also may be able to work with the firms in the sector to help develop employee benefit plans and services. Particular attention should be given to the female unskilled seasonal workers, because they are the least likely to be receiving benefits now, in many ways are the most in need of support services, and are the most likely to be left out as the sector changes.

The second set of recommendations for USAID has to do with continued use of the data collected for this study. The surveys provide a detailed profile of employees in the sector that is not available from other sources. These data are a source of baseline indicators that can be tracked and used as input to work plans for MAPP and other projects and as indicators of the impact of Mission programs on employment and income. Each technical report suggests a list of specific indicators that can be tracked with these data. Project managers should sort through these suggestions and develop a list of indicators to monitor and a plan for follow-up through subsequent panels of the surveys.

The final set of recommendations concerns the methodology of this study and the follow-up studies. The suggestions focus on the possibilities for making the next panels more focused and smaller by using the results of this study to define the topics to be covered and the firms and regions to be sampled.

In addition, the reports prepared so far include only preliminary descriptive analysis of a very rich data set. There is a strong recommendation that additional analysis of these data be pursued by the Mission and MAPP, with particular attention to multivariate analysis that links the firm-level and employee surveys and investigates the relationship between structural differences among firms, subsectors, and regions and work force composition and change. These analyses are essential to provide effective technical assistance to firms in labor force planning and to programs aimed at female seasonal workers.

Moroccan Agribusiness Employment Survey Project
Final Report

GENDER AND EMPLOYMENT IN MOROCCAN AGRIBUSINESS

VOLUME II

ENTERPRISE ANALYSIS

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18

TABLE OF CONTENTS

	Page
CHAPTER ONE	
INTRODUCTION	1
CHAPTER TWO	
GENERAL INFORMATION ON SAMPLE ENTERPRISES	3
INSTITUTIONAL FACTORS	3
Legal Status	4
Participation of Females on Board of Directors	4
Firm Integration and Foreign Investment	4
Total Sales	5
Total Production Costs	6
Wage and Benefit Costs	7
Technology Orientation	8
Diversity of Activities	9
Export Trade Status	10
Export Projection Increase	11
PRODUCTION INFRASTRUCTURE AND CONSTRAINTS	12
Degree of Provisional Difficulty	13
Degree of Security of Raw Products	13
HUMAN AND SOCIAL SERVICES	14
Maternity and Paternity Leave	14
Day Care Facility	15
Labor Relations Services	15
Skills Training Program and Request for Training Services	15
SUMMARY	17
CHAPTER THREE	
EMPLOYMENT CHARACTERISTICS	19
INTRODUCTION	19
EMPLOYMENT PROFILES	19
EMPLOYMENT PROFILES FOR POST-HARVEST HORTICULTURAL FIRM SAMPLE	20
EMPLOYMENT PROFILES BY TYPE OF SUBCOMMODITY SECTOR	23
Employment Profile in Processing Post-Harvest Activities	23
Summary	24
Employment Profiles in Packing Units and Fruit and Vegetable Cold Storage	29
SEASONALITY AS EMPLOYMENT FACTOR	35
Seasonality and Gender Specificity in the Processing Subcommodity Sector	43
Seasonality and Gender Specificity in the Packing and Fruit and Vegetable Cold Storage Subcommodity Sector	45

Influence of Commodity Export and Production Improvements on Gender Employment 47
Peak Seasonal Labor Requirements 47
GENDER LABOR PATTERNS 48
Modal Recruitment Methods 48
Degree of Difficulty in Recruitment of Laborers 49
Turnover by Employment Status and Gender 49
Absenteeism by Employment Status and Gender 50

CHAPTER FOUR
PRODUCTIVITY AND WORKER PERFORMANCE 52

INTRODUCTION 52
EVALUATING EMPLOYEE PERFORMANCE 52
SUPERVISION AS A PRODUCTIVITY CONCERN 54
DEVELOPMENT OF WORK PERFORMANCE MONITORING INDICATORS 55
MOTIVATIONAL FACTORS AFFECTING WORKER PRODUCTIVITY 56

CHAPTER FIVE
CONCLUSIONS AND RECOMMENDATIONS 60

CONCLUSIONS 60
Institutional and Organizational Factors 60
Labor Costs 61
Raw Product Provision Issues 61
Human Resource Service Provision 62
Employment Profiles 62
Employment Profiles in Processing Units 62
Employment Profiles in Packing and Fruit and Vegetable Cold Storage Units 63
Seasonality and Other Factors Affecting Employment 63
Productivity and Worker Performance 63
RECOMMENDATIONS 64

APPENDIX A: FIRM CLASSIFICATION AND MAJOR PRODUCTS HANDLED IN POST-HARVEST ACTIVITIES A-1

APPENDIX B: PHOTOGRAPHS OF GENDER ROLES AND WORKER PERFORMANCE B-1

LIST OF TABLES

Table		Page
1	Percent Distribution of Sampled Post-Handling Horticultural Firms by Region and Principal Economic Activity	3
2	Legal Status of Post-Handling Horticultural Industrial Units	4
3	Investment Source and Organizational Structure in Post-Handling Horticultural Industrial Units	4
4	1991-92 Sales by Post-Handling Horticultural Unit	5
5	1991-92 Sales by Region of Post-Handling Horticultural Unit	5
6	1991-92 Total Production Costs by Post-Handling Horticultural Unit	6
7	1991-92 Total Wages and Benefits and Indicative Employment Profile by Post-Handling Horticultural Unit	7
8	Projection of Mechanization by Post-Handling Horticultural Unit	8
9	Principal and Secondary Activities of Firms Sampled in Moroccan Agribusiness Employment Survey	9
10	Percent of Final Products Exported in 1991-92, Moroccan Agribusiness Employment Survey Firms	10
11	Percent of Increase in Exports Projected by Subcommodity and Percent of Firms Expecting to Increase Subcommodity Exports by Type of Firm's Principal Economic Activity	11
12	Index of Security of Raw Products by Post-Handling Horticultural Unit	13
13	Director's Preference for Skills Training by Employment Position in Post-Handling Horticultural Industrial Units	16
14	Director's Preference for Type of Skills Training Program in Post-Handling Horticultural Industrial Units	17
15	Employment Profiles in Post-Handling Horticultural Units, All Industrial Units	22
16	Employment Position in Post-Handling Horticultural Units, All Industrial Units	22
17	Employment Profiles in Post-Handling Units, Processing: Fruit and Vegetable Conserves	25

21

18	Employment Position in Post-Handling Horticultural Units, Processing: Fruit and Vegetable Conserves	25
19	Employment Profiles in Post-Handling Horticultural Units, Processing: Olives and Olive Oil	26
20	Employment Position in Post-Handling Horticultural Units, Processing: Olives and Olive Oil	26
21	Employment Profiles in Post-Handling Horticultural Units, Processing: Spices and Condiments	27
22	Employment Position in Post-Handling Horticultural Units, Processing: Spices and Condiments	27
23	Employment Profiles in Post-Handling Horticultural Units, Processing: Wine	28
24	Employment Position in Post-Handling Horticultural Units, Processing: Wine	28
25	Employment Profiles in Post-Handling Horticultural Units, Packing: Citrus	31
26	Employment Position in Post-Handling Horticultural Units, Packing: Citrus	31
27	Employment Profiles in Post-Handling Horticultural Units, Packing: *Primeurs*	32
28	Employment Position in Post-Handling Horticultural Units, Packing: *Primeurs*	32
29	Employment Profiles in Post-Handling Horticultural Units, Packing: Flowers	33
30	Employment Position in Post-Handling Horticultural Units, Packing: Flowers	33
31	Employment Profiles in Post-Handling Horticultural Units, Cold Storage Units	34
32	Employment Position in Post-Handling Horticultural Units, Cold Storage Units	34
33	Average Number of Seasonal Workers by Gender and Month: 1991-92, for Processing Activities in Post-Harvest Handling Units	44
34	Average Number of Seasonal Workers by Gender and Month: 1991-92, for Cold Storage and Packing Post-Harvest Handling Units	46
35	1991-92 Average Seasonal Peak Labor Requirements by Gender and by Post-Handling Horticultural Unit	47
36	Percent of Laborers by Gender and Status of Worker Recruited by Methods Used to Recruit Laborers: All Post-Handling Horticultural Units	48
37	Percent of Firms Stating Replacement by Employment Position and Gender in Post-Handling Horticultural Industrial Units	49

22

38 Evaluation Criteria for Performance of Workers, All Post-Handling Horticultural Units 53

39 Evaluation Criteria for Performance of Administrative Staff and Technical Cadres and Directors, All Post-Handling Horticultural Units 54

40 Directors' Perceptions and Ranking of Motivational Factors Affecting Productivity of Employees in All Post-Handling Horticultural Units 57

LIST OF FIGURES

Figure		Page
1	Total Seasonal Employment in Processing Units	36
2	Seasonal Employees: Processing, by Gender	37
3	Percent Female Seasonal Employment, by Processing Unit	38
4	Seasonal Employment, by Gender and Type of Processing Unit	39
5	Percent Seasonal Employment, Packing/Storage: Gender	40
6	Seasonal Employment: Packing and Storage, by Gender	41
7	Total seasonal Employment by Packing Unit, Gender	42

CHAPTER ONE

INTRODUCTION

Volume III of the Moroccan Agribusiness Employment Study is divided into three sections. The first section gives a general description of the sample of enterprises in which employees are interviewed and from which case studies of selected employees are drawn. The second section provides employee profiles by occupational status and by permanency of work for enterprises according to type of principal economic activity. The third section examines management's perceptions of motivational factors affecting worker performance, their stated recruitment patterns and their evaluative measures of productivity for different categories of employees. Recommendations for continued studies and monitoring indicators are provided in the conclusion.

Section one is a sociological baseline, not an economic analysis of firms. It provides a description of enterprises in the sector with basic information on institutional, organizational, technical, and training factors. Due to US legislation affecting export promotion assistance (Section 599(C) of P.L. 102-391, labor representation, maternity leave and health care services are specifically examined. Human resource training strategies are assessed to determine which employees are now receiving training and what type of training it is, what kind of training directors consider beneficial to firms for improving employee performance, and for which kind of training, management would want to receive development assistance. Background information on firms using these indicators serves as a framework to facilitate disaggregation of data for subsequent employee data analysis (Volume IV) and future monitoring of development assistance to these firms.

Section two provides employee profiles by type of industry and type of commodity processed, packed or associated with economic activities of cold storage units. Employee profiles are constructed in two ways. Gender employee profiles are provided by occupational position and summary employee profiles are constructed by permanency of employee work status. Since quality control in largely nonmechanical environments is highly dependent on the facility for sound and frequent supervision by technical cadre, supervisory ratios of worker: technical cadre are calculated. Seasonality, a factor likely to affect employment in agribusinesses, is noted by analyzing male and female worker employment patterns by month and by principal economic activity of the enterprise.

The third section includes an analysis of factors affecting worker performance and productivity according to enterprise directors or managers. Selection of laborer according to qualifications and experience likely improves worker performance. Recruitment patterns identified by directors are examined. Directors also provide their opinion on and rank of 19 factors likely to motivate workers to enhance their productivity. Employees are asked to respond to the same set of questions. The similarities and differences in ranking of motivational factors between firm directors and employees in different worker posts can be compared by findings in Volume III and Volume IV. Most firm directors are expected to be concerned with worker productivity and to encourage better performance through evaluation and regular monitoring of worker activities. Analyzed are criteria used by sample firm directors for measuring worker performance. To illustrate the difficulty in measuring individual productivity, photographs on worker positions and activities are included in Appendix B. These photographs also serve as a basis for which subsequent photographs can be taken at different periods to determine what social and environmental conditions of the work place and roles of male and female workers have taken place as firms receive development assistance. It is expected that social and

environmental conditions of the work place will improve under USAID agribusiness development assistance and thus positively impact on the welfare of employees.

With enterprise level data, under the MAPP, individual firms can be compared to averages of sampled firms for specific monitoring and post evaluation studies of the impact of development assistance on employment and productivity. The Population and Human Resource Office can similarly exploit the data for activities related to their private sector training and health care programs. Two sets of diskettes of firm organizational, institutional, and employee data have been prepared in Lotus123 and provided to USAID with this study. Specific monitoring and evaluation of firms which are to be reached under MAPP and under various Population and Human Resource Office Program Assistance can thus be monitored by panel studies of the same firms due to the breadth and depth of information included in the two surveys.

Enterprise findings are expected to have several uses, including setting the framework for analysis of employee data. Findings facilitate subsequent impact studies on factors affecting female employment in the agribusiness horticultural export sector. Indicators of human and social services provision, gender employee profiles, analysis of manager's perceptions of factors affecting worker productivity and types of evaluative measures firm directors use to measure worker performance provide potential indicators for USAID's program strategies: "welfare" and "employment creation". Enterprise findings suggest potential indicators to measure changes and improvements in status of both working class men and women and ways to enhance the impact of women's employment in this sector on them as well as on firm productivity.

CHAPTER TWO

GENERAL INFORMATION ON SAMPLE ENTERPRISES

INSTITUTIONAL FACTORS

The institutional setting of firms sampled is described by the following indicators: legal status, participation of females on boards of directors, firm integration, foreign investment, total sales, production costs, labor costs, share of labor in production costs, technology orientation, degree of diversity of post-harvest handling activities, export status and future planning in the export sector.

Table 1 provides a general description of the location of the sampled firms and their type of principal activity. As noted below, nearly 29 percent of the interviews were carried out in Agadir and within Agadir 65 percent were carried out in packing units engaged in export of *primeurs*.In Berkane, where only 7 percent of interviews took place, 75 percent were in citrus packing units. Interview in flower packing units were held in both Marrakech and Agadir, never exceeding 15 percent of interviewed units in any one place. All interviews in Fez were in olive and olive oil processing units, although as will be noted below these units carried out a diversity of activities including caper and carob processing. Similarly, 100 percent of interviews in Larache were held in fruit and vegetable canning activities, and that was in only one major unit. This processing unit also engages in spice and spice oil processing as secondary activities. In Meknes, a rich region of grape production, 40 percent of units interviewed were wine processing units. About 54 percent of units interviewed in Marrakech were olive oil and olive processing units; other activities included citrus, flowers and fruit and vegetable canning, which reflects the industrial base of this region in post-harvest handling activities. The distribution of units interviewed in Casablanca never exceed 23 percent in any one post-harvest handling activity, not atypical of the major industrial region of Morocco.

TABLE 1

PERCENT DISTRIBUTION OF SAMPLED POST-HANDLING HORTICULTURAL FIRMS BY REGION AND PRINCIPAL ECONOMIC ACTIVITY (n=59): 1993

Region	Total	Packing Unit			Processing Units				Cold Storage
		Citrus	Primeu	Flower	Fruits & Veg.	Olives & Oil	Spices & Condiment	Wine	
Larache	1.7	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Berkane	6.8	75.0	0.0	0.0	0.0	0.0	25.0	0.0	0.0
Casablanca	22.0	15.4	23.1	7.7	7.7	15.4	7.7	15.4	7.7
Meknes	8.5	0.0	0.0	0.0	20.0	20.0	0.0	40.0	20.0
Agadir	28.8	23.5	64.7	11.8	0.0	0.0	0.0	0.0	0.0
Fez	10.2	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Marrakech	22.0	7.7	0.0	15.4	23.1	53.8	0.0	0.0	0.0
Total	100.0	16.9	23.7	8.5	10.2	27.1	3.4	5.1	5.1

Legal Status

Nearly 70 percent of firms are registered as either corporations, *société anonyme* (44.1 percent), or privately owned companies *personnelle* (25.4 percent) as seen in Table 2. About 20 percent or 12 are legally run as cooperatives, one firm was semi-public and the remainder were registered under other statutes. Post-handling horticultural units sampled are in the private sector with most firms having a corporate structure.

TABLE 2

LEGAL STATUS OF POST-HANDLING HORTICULTURAL INDUSTRIAL UNITS: 1992-93

Legal Status	No.	Percent
Société Anonyme	26	44.1
Personnel	15	25.4
Coopérative	12	20.3
S.A.R.L.	4	6.8
Semi-public	1	1.7
Other	1	1.7
Total	59	100.0

Participation of Females on Board of Directors

Of 58 firms, two-thirds have a Board of Directors (67.2 percent). Only 12 firms (20 percent) include female members on their boards and out of those, 93 percent have only 1 female member. The median number of male members is 6. The lack of females on decision-making bodies may be a deterrent to addressing human resource issues and the impacts of new technologies on women.

Firm Integration and Foreign Investment

Source of capital and vertical integration of firms within the sector may affect firm labor policies and use of new processing technologies that may displace unskilled female workers. Table 3 shows that 88 percent of the capital invested in sample firms was Moroccan. Few firms are subsidiaries of others; few have subsidiaries. Eight firms are subsidiaries of another Moroccan company and two are affiliated with a foreign company. Two firms have their own subsidiaries.

Of the 12 percent of firms having some foreign capital investment, the mean amount of investment was 46 percent and median 33 percent, due to one company having 100 percent of its capital from abroad (in Berkane) and another 67 percent (in Agadir), the newer regions of post-horticultural unit growth. No foreign capital was found for firms located in Fez or Meknes and only one firm reported 2 percent foreign capital in Casablanca, the more established regions of horticultural processing activities. This sector appears to be developed mainly by Moroccan investors with only incipient integration of firms.

The extent of integration of sector firms should be monitored as a key organizational indicator. Much agricultural commodity research indicates that violations of labor laws occur more frequently in multinational or vertically integrated firms. Our data suggest that vertical integrated, wholly owned Moroccan firms also deserve attention when monitoring compliance to labor laws and gender sensitivity of technologies.

TABLE 3

INVESTMENT SOURCE AND ORGANIZATIONAL STRUCTURE IN POST-HANDLING HORTICULTURAL INDUSTRIAL UNITS: 1992-93

Investment Organization	Number	Percent
Wholly owned national firm:	51	87.9
without subsidiary	43	74.1
with subsidiary	8	13.8
Mixed foreign and national firm:	7	12.0
with partial foreign capital	5	8.6
with 100% foreign capital	2	3.4
Total	59	100.0

TABLE 4

1991-92 SALES BY POST-HANDLING HORTICULTURAL UNIT
(Million Dirhams)

Type of Unit	Mean	Std. Dev.	N
Packing:Citrus	271.680	377.693	10
Processing:Wine	155.536	111.695	3
Packing:Flowers	151.210	307.033	5
Cold Storage:Fruits & Vegetables	89.970	137.423	3
Processing:Fruits & Vegetables	72.190	82.367	6
Processing:Olives & Olive Oil	68.457	89.320	13
Processing:Spices & Condiments	73.000	74.953	3
Packing:Primeurs	31.869	81.493	12
Average	111.442	207.539	55

Four firms did not provide sales data.

Total Sales

One of the most difficult questions to ask in private enterprises is total sales. Of the 55 (out of 59) firms that reported 1991-92 total sales or *chiffre d'affaires*[1], most provided a best estimate rather than the exact amount. Table 4 ranks total sales by principal activity of firms. The highest total sales was found among citrus packers, second among wine processing units and third in the relatively new industry, flower packing. Processing units, regardless of principal commodity, demonstrate about the same average amount of total sales. The average sales for all firms was 111.44 million DH ($12.96 million). The average sales stated by managers of citrus packing units was 271.68 million DH or $31.59 million (using 8.6 DH per US$) and the least among *primeur* packing units, 31.867 million DH or $3.71 million.

Total sales was then divided into quartiles. Most firms had low total sales. There were 47 firms in the first quartile, 4 in the second, 0 in the third and 4 in the fourth due to bunching of sales. The average total sales of first quartile firms was 39.94 million DH. Second quartile sales averaged 278.41 million DH and fourth quartile sales was nearly 20 times more than first quartile sales, or 784.59 million DH. Three fourth quartile firms were citrus packing units (the remainder, a flower packing unit). Out of the 47 firms in the first quartile, 13 were olives and olive oil processing, 11 in *primeur* packing, which is 50 percent of all firms. Hence variation in total sales is due to the clustering of firms in the lower end of the scale and the very high sales of 4 large firms.

Regional differences in average total sales are indicated in Table 5. Differences are affected by several factors. Among them is specific types of post-harvest activities are concentrated within a region (eg. packing of citrus and *primeurs* in Agadir). Another is only one firm is selected in Larache, the largest

TABLE 5

1991-92 SALES BY REGION OF
POST-HANDLING HORTICULTURAL UNIT
(Million Dirhams)

Region	Mean	Median	N
Larache	223.365	223.365	1
Berkane	233.036	64.323	4
Casablanca	141.294	35.000	13
Meknes	114.128	30.350	5
Agadir	67.112	10.411	15
Fez	46.625	36.000	6
Marrakech	38.831	19.000	11
Total	109.370	20.000	55

Four firms did not provide sales data.

[1]In British English it is called turnover.

tomato and spice processing plant in the region, indeed in Morocco. Hence, the data describe sales of only one firm, not a regional average. This firm nevertheless is widely known for its major impact on employment and production of tomatoes in the region. A third factor is diversity of final products produced within the firms. Some of the firms have commodities as secondary or tertiary products that may bring in higher sales than their primary product. For example 7 *primeurs* packing units export a large tonnage of fresh red pepper as a secondary or tertiary product. This subcommodity has higher value than tomatoes. Total sales in olives and olive oil post-harvest units is also affected in the Fez region by sales not only of olives and olive oil but caper exports. Appendix A provides a list of sample firms by region and principal activity and major secondary products sold.

The two regions with the highest total sales are Larache (Loukkos) and Berkane (Moulouya). Since both regions have firms with Spanish investment and American export contractual arrangements, notably for *niora* (pepper used as paprika) and its oleoresin. Secondary and tertiary activities as well as primary commodities combined require tracking for employment opportunities for men and women within units. If the principal commodity security in world trade is less secure due to its highly competitive market (eg fresh tomatoes), then seasonal employment risks are reduced due to economic trade in multiple commodities and trade in subcommodities in which trade is established.

Total Production Costs

The total costs of production (*charges totales*) by type of post-handling unit for 1991-92 is indicated below. The average for the total sample is 40,799,869 DH or US$4.744 million (n=51). Within sector variability is least among wine processing units. The lowest average production costs are found among citrus packing units, 23.9 million DH or US$2.8 million; however, 3 citrus packers did not report production costs. The highest costs are found among cold storage units, 85,640,712 DH or US$10.0 million. Factors such as size of firm, type and amount of technology, capacity and employment costs affect sector variability. Directors were thus asked to provide total labor costs and its relative costs to production since our focus is on employment issues not economic determinants of costs of production.

TABLE 6

1991-92 TOTAL PRODUCTION COSTS BY POST-HANDLING HORTICULTURAL UNIT (Million Dirhams)

Type of Unit	Mean	Standard Dev.	n
Cold Storage:Fruits & Vegetables	85.641	131.297	3
Processing:Wine	64.939	58.136	3
Packing:Flowers	45.641	67.574	4
Processing:Olives & Olive Oil	43.338	72.612	15
Processing:Fruits & Vegetables	40.134	44.497	5
Processing:Spices & Condiments	39.961	0.000	1
Packing:Primeurs	29.859	90.322	13
Packing: Citrus	23.946	28.190	7
Average	40.800	708.248	51

Eight firms did not provide production cost data.

Wage and Benefit Costs

Low labor costs have been frequently argued to be a major reason for Morocco's success in world trade in agribusiness exports (Sullivan, 1991). In the sample, production costs and labor costs were provided by 51 firms (86 percent of sample). The median proportion of labor costs relative to production costs is 14 percent, with a range from 2 percent to 73 percent. Twenty-five percent (25 percent) of firms reported total costs of wages and benefits is 9 percent or less of its production costs; 75 percent reported labor costs constitute less than 24 percent of total production costs. Only five firms indicate that 40 percent or more of production costs went towards wages and social benefits. For sampled firms, labor costs are indeed a small proportion of enterprise production costs.

Are low labor costs the result of employing a large number of females? Employee occupational status, percent of females employed in each status, and labor costs are indicated below by type of post-horticultural unit. Although more detailed employee profiles are provided in section two, Table 7 demonstrates that it is not the percent of females working as seasonal laborers that lowers labor costs. Labor costs are high in spice and condiment processing units where 86.8 percent of workers are seasonally employed and whom 80 percent are female and lowest in *primeur* packing units where 90.8 percent of workers are seasonally employed and 76 percent are female.

TABLE 7

1991-92 TOTAL WAGES AND BENEFITS AND INDICATIVE EMPLOYMENT PROFILE BY POST-HANDLING HORTICULTURAL UNIT
(Million Dirhams)

Type of Unit	Mean	Std. Dev.	n	Indicative Employment Profile					
				Tech. Cadre		Personnel Staff		Seas. Workers	
				%	%female	%	%female	%	%female
Processing:Wine	15.587	14.063	3	3.2	4.5	12.5	40.7	23.5	5.0
Processing:Spices & Condiments	8.800	0.0	1	0.3	0.0	1.0	87.5	86.8	80.0
Processing:Fruits & Veg.	7.390	9.499	6	1.4	0.0	3.0	41.4	82.9	64.1
Cold Storage:Fruits & Veg.	6.744	7.710	3	3.4	0.0	3.4	28.6	79.7	66.9
Processing:Olives & Olive Oil	4.186	5.670	16	0.3	15.6	0.7	65.3	25.7	83.6
Packing: Citrus	3.382	2.343	8	1.0	3.8	1.5	22.5	90.7	66.7
Packing:Flowers	2.717	2.987	4	0.9	27.3	0.6	27.0	85.2	82.5
Packing:Primeurs	0.432	0.264	11	0.6	0.0	1.4	17.4	90.8	76.0
Average	4.419	6.526	52	1.1	7.1	2.4	42.4	74.6	71.8

Seven firms did not provide wage cost data.

The lowest labor costs are found among *primeur* packing units (431,721 DH or US$50,200, n=11). Highest labor costs are found in wine processing units, with an average of 15,586,609 DH or US$1.812 million, n=3). Average labor costs is 4,419,054 DH (US$513,843) with a standard deviation of 6.526 million DH. The proportion of production costs paid out to labor is thus a potentially better indicator of "private sector competitiveness" affecting female employment than total wages due to the

importance now of low labor costs in providing a competitive advantage in the global market place of fresh agricultural produce and preserved fruits and vegetables for Moroccan firms.

Technology Orientation

To address the issue of employment creation, directors of post-harvest handling units were asked three questions: whether they have plans to mechanize, main reasons they would mechanize, main reasons they would not mechanize. In general when there is more automation there is less need for unskilled workers who now are 71 percent of the labor force in this sector. If the labor class is reduced, this would impact on women, since a high proportion of females work as unskilled workers in nearly all types of post-harvest horticultural units.

Table 8 is constructed to combine responses to two separate questions. The first part of the table enables the number of firms interested in mechanization to be counted by reason for mechanization. Separately coded are four reasons: "increase productivity", " reduce labor", "increase productivity and reduce labor" and "improve quality." Some directors would only specify a combined reason with reducing labor. Hence responses to each category are counted separately. Only single issue responses were provided for reasons not interested in mechanizing.

TABLE 8

PROJECTION OF MECHANIZATION BY POST-HANDLING HORTICULTURAL UNIT (n=59)

Type of Unit	N	Reason for:					Reason against:			
		Improve Quality	Increase Productivity (1)	Reduce Labor (2)	Both (1) + (2)	Other	Too Costly	Don't Need	Other	N/A
Packing: Citrus	10	0	0	2	0	1	3	3	0	4
Packing:Primeurs	14	0	6	0	4	0	1	0	0	13
Packing:Flowers	5	0	2	0	1	0	0	0	0	5
Cold storage:Fruits & veg.	3	0	0	0	1	0	0	2	0	1
Processing:Fruits & veg.	6	1	1	0	1	1	0	1	0	5
Processing:Olives & oil	16	4	3	1	2	0	0	2	2	12
Processing:Spices & cond.	2	1	0	0	0	0	0	0	1	1
Processing:Wine	3	0	1	0	0	0	0	1	1	1
TOTAL	59	6	13	3	9	2	4	9	4	42
Percent	55.9	10.2	22.0	5.1	15.2	3.4	6.7	15.2	6.7	71.2

Thirty-three firm directors stated they plan to mechanize, or 56 percent of sample firms. Twenty-five gave reasons related to labor costs, or 75.7 percent of sample firms. Only 6 firm directors (10.2 percent) stated mechanization is planned because it would improve product quality. Two firms (3.4 percent) state it is for other reasons besides increasing productivity, reducing labor or both. Firm directors who want to mechanize to improve quality are only in the processing industries, with 4 firms engaged in olives and oil processing. *Primeur* packing unit directors are the most concerned with improving productivity through mechanization with 10 firm directors including that as a reason for

mechanization. Reasons against mechanization were given by only 17 firms. Nine firms simply said they did not need it. Being too costly is an issue for only 4 firms, 3 of which are in citrus packing.

Within sectors, plans for mechanization are highest for flower packing units, lowest for cold storage of fruits and vegetables and wine processing, no doubt because flower packers are recently established and newer technologies are continually being introduced. Reducing labor as the criterion of mechanization is not a major criterion by itself since only directors of 2 citrus packing units and 1 director of olive and olive oil processing units explicitly stated labor reduction as the major reason for mechanization. However, implicitly it is a criteria since 25 firm directors referred to it either explicitly or implicitly. Because of the sensitivity of responses to this question with respect to potential redundancy, these findings suggest that support for technology investments be encouraged to improve quality as a way to lead to increased productivity since labor reduction and increasing productivity are currently perceived as integrated and its impact would serve to decrease unskilled laborers who are mostly women.

Diversity of Activities

Diversity of activity is important because firms with different mixes of products or year-round as opposed to seasonal processing affect employment characteristics. Although 47 percent of firms engaged in some secondary activities, most firms are engaged in specific types of post-handling activities — they are either in processing or packing or engage in economic activities which use equipment needed for primary economic activities. Cold storage for example is mainly a secondary activity of citrus and *primeur* packing units because it enables these units to use their existing cold storage facilities which they are now required by law to maintain. Out of 15 firms who principally engage in *primeur* packing, only one also does some citrus packing and another provides cold storage, the rest solely are active in *primeur* packing. No firm engages in flower packing or wine processing as secondary activities, no doubt due to additional investments in special equipment, technical skills and market segmentation.

TABLE 9
PRINCIPAL AND SECONDARY ACTIVITIES OF FIRMS SAMPLED IN MOROCCAN AGRIBUSINESS EMPLOYMENT SURVEY, 1993

Post-Harvest Activity	Principal Activity		Secondary Activity	
	n	Percent	n	Percent
Canning: Fruits & Veg.	15	25.4	2	3.4
Spices, Condiments	2	3.4	7	11.9
Olives, Olive Oil	6	10.2	4	6.8
Grapes, Wine	3	5.1	0	0.0
Cold Storage	1	1.7	5	8.5
Packing-Citrus	12	20.3	2	3.4
Packing-Primeurs	15	25.4	8	13.6
Packing-Flowers	5	8.5	0	0.0
TOTAL	59	100.0	28	47.6

The tonnage of produced or packaged was compared to the number of units engaged in the product activities as a secondary or primary activity to assess whether principal activity could serve as a classification for firms for further employment analysis. Data on tonnage of products for the commodities: wine, olive oil, spices, vegetable and tomato products, flowers were found to be classified by firms which declare these products as their principal activity. Similarly, the 12 units which declare their principal economic activity as citrus packing packed 91 percent of citrus tonnage. Total fruit tonnage produced by fruit and vegetable processing units is only 30 percent. The remaining 70 percent is split between olives and olive oil processing units and cold storage units. Least straightforward is the classification of spice and condiment processors. While 100 percent of spices are processed in two units, only 3 percent of condiment tonnage is processed there; 56 percent is produced in 3 olive oil and olive processing units and 41 percent in 4 fruit and vegetable processing units.

The total number of post-horticultural units sampled which engage in some *primeur* packing is 23, or 39 percent of firms sampled. Of these, 13 engage only in *primeur* packing. Despite the number of units engaged partially or full time in *primeur* packing, 85 percent of *primeur* tonnage is packed by the 15 firms declaring this activity as their principal economic activity.

Classifying firms is not straightforward by type of commodity. Diversity of activities is noted mainly in condiments and fruit processing activities. Classification of firms by processing and packing/cold storage is more suitable for firm comparisons than classifying by principal economic activity due to the limited specialization by firms in processing or packing specific commodities. Whether firms become more specialized in the future will therefore be an interesting one to track since the diversity of activities in processing firms, in particular, now appears a way to cope with seasonal availability of products and prolong periods of production. If firms become more specialized, then what would be the effect on employment of women and the kind of employment opportunities available? One indication of the effects of specialization is to look at the employment profiles of sample firms with the most specialization (flower packers and wine processors) and compare them with units of less commodity specialization (olives and olive oil processing and fruit and vegetable canning) to asses impact on employment creation for women.

Export Trade Status

Firms were randomly selected from lists of post-horticultural units located within specific regions likely to engage in export trade. They were not selected based on the fact they were already actively engaged in exporting horticultural products although they were certainly known by regional coordinators that firms listed exported or were highly likely to export their products. Table 10 presents the percent of product tonnage of various commodities that are exported by sample firms.

TABLE 10

PERCENT OF FINAL PRODUCTS EXPORTED IN 1991-92
MOROCCAN AGRIBUSINESS EMPLOYMENT SURVEY FIRMS: 1992-93 (n=59)

PERCENT EXPORTED	Average		Range		n
	Mean	Median	Low	High	
Citrus	73	70	46	100	12
Primeurs	68	71	30	100	20
Flowers	82	85	60	100	5
Processed: Olives	95	97	75	100	13
Tomatoes	51	-	12	89	2
Vegetables	92	95	80	100	3
Fruit	84	99	10	100	8
Spices	100	100	100	100	1
Condiments	95	100	61	100	11
Olive Oil	57	-	20	94	2
Wine	12	-	4	20	2

High export of commodities are noted. The lowest average percent of exports was in wine (12 percent), followed by processed tomatoes, 51 percent and olive oil, 57 percent. Median percent of exports of *primeurs* is 70 percent. The median percent of condiments and spices exported was 100 percent. Capers are the most common condiment processed and exported and one which is well known in the world market for its excellent quality, though its production is still largely uncultivated. *Niora* or paprika is the spice produced in the firms sampled. Table 10 indicates little difference is observed between means and medians. Within firm differences may exist but the total exports of products is relatively uniform across firms. The export status potential for selected commodities is high. Data suggest, however, that certain products are already more oriented to the export market than others and their transformation activities and institutional organization already affected by global marketplace forces.

Export Projection Increase

To assess which firms expected to increase their export projections in 1993-94, directors of all firms were asked whether they expected to increase exports, regardless of whether the firm considered the subcommodity their principal or secondary activity. Noted earlier is that several firms export multiple items. We wanted to know whether positive export projections were coming more from firms whose commodity was principally the transformation of the subcommodity or from firms which transform the projects as secondary activities since changes in export orientation might affect employment generation for specific types of laborers beyond the season of specific products and potential improvement in employment opportunities for females if exports of certain products were expanded. Table 11 presents two sets of information. Column one indicates the percent of export increase in subcommodity stated by all firms. The remaining columns indicate from which types of firms projected subcommodity export increase is expected.

TABLE 11

PERCENT OF INCREASE IN EXPORTS PROJECTED BY SUBCOMMODITY AND PERCENT OF FIRMS EXPECTING TO INCREASE SUBCOMMODITY EXPORTS BY TYPE OF FIRM'S PRINCIPAL ECONOMIC ACTIVITY: 1993

Positive Posture towards increasing exports:1993-94	% increase in exports projected for sub-commodity	Percent of Firms with Positive Export Projections by Firm Classified by its Principal Economic Activity (n=58)							
		Packing Unit			Processing Units				Cold Storage (n=3)
		Citrus (n=10)	Primeurs (n=13)	Flowers (n=5)	Fruits & Veg. (n=6)	Olives & Oil (n=16)	Spices & Condim. (n=2)	Wine (n=3)	
Citrus	12.1	71.4	14.3	0.0	14.3	0.0	0.0	0.0	0.0
Primeurs	31.0	22.2	72.2	0.0	0.0	5.6	0.0	0.0	0.0
Flowers	1.7	0.0	0.0	100.0	0.0	0.0	0.0	0.0	0.0
Processed Olives	19.0	0.0	0.0	0.0	27.3	72.7	0.0	0.0	0.0
Olive Oil	1.7	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Processed:Spices	1.7	0.0	0.0	0.0	0.0	100.0	0.0	0.0	0.0
Condiments	8.6	0.0	0.0	0.0	20.0	80.0	0.0	0.0	0.0
Tomato:Concentrate	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other Tomato	1.7	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Processed:veg.	3.4	0.0	0.0	0.0	100.0	0.0	0.0	0.0	0.0
Processed:fruit	10.3	0.0	0.0	0.0	66.7	33.3	0.0	0.0	0.0
Processed: wine	3.4	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0

One *primeur* packing unit did not respond.

Exports of *primeurs* are projected to increase 31 percent. Positive export projections are given by 72.2 percent of firms whose principal activity is *primeur* packing, 22.2 percent of firms whose principal activity is citrus packing and 5.6 percent from processing units whose principal activity is processing olives and olive oil. Citrus exports also are expected to increase by 12.1 percent with positive projections coming from 71.4 percent of citrus packers, 14.3 percent from *primeur* packers and 14.3 percent from fruits & vegetable processing units. Given the different equipment needed for packing from canning, these export projections of fresh fruits and vegetables from processing units and citrus packers should affect employment of seasonal workers.

Similarly exports of processed olives are expected to increase 19 percent resulting from nearly 73 percent of firms principally engaged in olive and olive oil processing planning increases but also by 27 percent from activities of fruit and vegetable processing units. Given the seasonal differences in peak periods for olive processing (autumn) and fruit and vegetable processing (late spring and early summer), these export projections may also suggest potential employment creation due to promotion of export opportunities for this subcommodity.

From earlier reports 100 percent of spices are exported. However, previous spice exports were declared by only firms whose principal activity is spice exporting. Projected is a 1.7 percent increase in spice exports from olive and olive oil processing units. Projection for increasing exports of flowers, tomatoes, vegetables, olive oil, and wine are stated only from firms whose principal activity focuses on these specific subcommodities.

Table 11 indicates that increases in export projections are mainly from firms whose principal activity is to engage in transformation activities of that specific subcommodity. Intentions to increase diversity of exports is noted, however, by citrus and *primeur* packers and fruit and vegetable and olive and olive oil processing units. The diversity of products indicates opportunities to increase the number of months they operate, a factor, given existing working conditions, likely to create further employment opportunities for workers, particularly female workers.

PRODUCTION INFRASTRUCTURE AND CONSTRAINTS

The reliability of provision of raw products is likely to affect the ability of packing and processing unit operations and hence seasonal employment. For example, when the price of tomatoes is too high at the wholesale market, tomato processing plants close, as occurred this year in Agadir. Similarly, when there is a low seasonal production of olives, some of the smaller firms close early, thereby seasonal workers look elsewhere for other type work or units turn to olive oil processing instead of canning which affects the gender of labor employed. As seen below, women are more involved in canning and men in oil processing. The following are indicators of the degree of provisional difficulty and the degree of security of raw products. Both issues are to be addressed in a detailed way under the MAPP in its *filiére* approach towards improving the horticultural export sector. Evident from employee profiles is that security of base products is a gender sensitive variable as the higher the security, the greater the security of employment of female workers.

Degree of Provisional Difficulty

Seventy one percent (71.2 percent) of firms stated they had some difficulty obtaining primary products. Out of these, 23.7 percent said they have great difficulties with obtaining base products used by the industrial unit. Distance of production from firm location was not an issue in obtaining products to transform. On average, 72 percent of firms obtain their primary products from the same region where they are located. Nearly 51 percent of firms obtain 100 percent of their production from the same region.

Degree of Security of Raw Products

Directors were asked to identify the ways they obtain their raw products for packing, processing, or cold storage. Response choices were open market, short term seasonal contract with farmers, long term (2 or more seasons) contract with farmers, farmers associated to firm, such as members of a cooperative, farm integrated with the firm. An index of base product security was formed which ranged from 1 to 8, where 8 indicates a fully integrated firm; 7 indicates that 100 percent of products come from cooperative members or from long term contracts with farmers; 6 means products are obtained from a mix of cooperative members, long term contractors, open market, but more than 50 percent of source products come from cooperative members or adherents, less than 50 percent from the open market; 5 indicates that 50 percent or more of products are based on short term contracts with farmers or from the open market, less than 50 percent come from cooperative members or from long term contracts; 4 means no long term contracts or cooperative member sources, up to 50 percent of products are derived from short term contracts with farmers or open market; 3 means firms have made arrangements other than the above with farmers; 2 means some mixed arrangements besides a cooperative arrangement;and 1 is open market only as source of product.

TABLE 12

INDEX OF SECURITY OF RAW PRODUCTS BY POST-HANDLING HORTICULTURAL UNIT
(In Percent)

Type of Unit	Index of Raw Product Security								n
	Low 1	2	3	4	<50% 5	>50% 6	100% 7	Integ. 8	
Processing:Wine	0.0	0.0	33.3	0.0	0.0	33.3	33.3	0.0	3
Processing:Spices & Condiments	0.0	0.0	50.0	0.0	0.0	50.0	0.0	0.0	2
Processing:Fruits & Veg.	0.0	0.0	0.0	0.0	33.3	66.7	0.0	0.0	6
Cold Storage:Fruits & Veg.	0.0	0.0	0.0	0.0	33.3	33.3	0.0	33.3	3
Processing:Olives & Olive Oil	6.3	0.0	6.3	18.8	68.8	0.0	0.0	0.0	16
Packing: Citrus	0.0	0.0	0.0	0.0	0.0	10.0	80.0	10.0	10
Packing:Flowers	0.0	0.0	0.0	0.0	20.0	20.0	0.0	60.0	5
Packing:Primeurs	0.0	7.1	14.3	14.3	0.0	21.4	28.6	14.3	14
Total Percent	1.7	1.7	8.5	3.4	11.9	39.0	22.0	11.9	100.0

Most post-handling horticultural units do not have guaranteed or secure sources of base products for obtaining their base products. with the exception of citrus packers (90 percent secured by its own production or that of its cooperative members). Only 60 percent of flower packers have 100 percent assured flowers despite the specialization of the industry. *Primeur* packers are even less assured of sufficient products with only 42.9 percent of base products 100 percent assured and 21 percent of raw products guaranteed by only temporary arrangements with growers and intermediaries. However, if units are able to run adequately on only 50 percent confirmation of raw products, then citrus packers are the most secure (100 percent), followed by flower packers (80 percent), olive and olive oil processing units (68.8 percent), processors of fruits and vegetables or wine (66.6 percent), *primeur* packers (64.3 percent), spice and condiment processing units (50 percent) and fruit and vegetable cold storage units (33.3 percent).

If raw products were able to be more guaranteed, industrial units might be able to undertake better human resource planning and development. When there is uncertainty that they can operate at full production because they don't have guaranteed supplies, it is difficult to plan the number of line workers needed on a permanent basis or consider investing in services which would help improve the welfare and stability of their work force. Ranking units by guarantee of raw products by constructing an index similar but more precise than this can be a potentially useful indicator for periodic monitoring of base product influence on improvement in employment creation and employee welfare.

HUMAN AND SOCIAL SERVICES

Of major concern is the welfare of employees within the post-harvest handling horticultural export sector. Within this section we address four issues: maternity and paternity leave, day care facility, labor relations services, and skills training programs. Data are provided for the sector since variation within firm type and by subcommodity type is not apparent. As evidenced below, social and health services are seldom developed for seasonal workers due to their temporal association with the firm. There is no legal violation by firms if they do not provide the services for temporary workers. The law does state however that if there are a certain number of employees, medical services are to be included regardless of permanency of work status.

Many workers move from unit to unit but stay in the sector. The average horticultural employment experience for permanent workers is 11 years and for seasonal workers, 8 years. Moreover some employees indicated they worked in the same firm 8 years, one interviewed in the case study even worked in the same firm for 22 years as a seasonal worker. The average length of employment in the same firm in which they were interviewed for seasonal workers in packing units, however, was 4.5 years or 54 months. In processing units, the average length of time in the same firm for seasonal employees is only 21 months or 1.75 years. Hence, while technically firms need not provide human resource services for seasonal employees, as a class of workers they work cum permanent workers, especially in processing firms. If services are offered in firms, what would be the availability of these services to all workers since by law they are only legally bound to service permanent workers?

Maternity and Paternity Leave

About 73 percent of firms stated they provide maternity and paternity leave for their employees. Paid maternity leave is highest for administrative personnel (66.1 percent) and lowest for seasonal

workers (16.4 percent), both categories where there is high concentration of female employees. Sixty percent of firms provide paid maternity or paternity leave to permanent workers of lower statuses and 62.5 percent of firms provide leave to directors and technical and administrative cadres. Of the 73 percent of firms who extend leaves, 86% provide paid leave.

Day Care Facility

Firms were also asked if they provided a creche or day care facility for employees' children. More than 95 percent provide no facility. Out of 58 firms responding, only three provide day care services for administrative and technical and director's children, 2 provide creches for seasonal worker children and one for permanent workers in lower positions (*ouvriers/ouvrieres*). Separation of family and work responsibilities is the norm.

Labor Relations Services

Within firms, workers may approach the staff in a variety of methods. The two most common are through labor unions or by workers having a personnel delegate (*délégué du personnel*). Only 35.6 percent of firms either had labor unions (14 firms) or a worker delegate who represents worker concerns to management (7 firms). When directors or managers were asked if they attend meetings in which labor unions are present, the response was positive and average frequency of meetings was 5.4 (median 4). Sixty-four percent of directors reported similar topic discussions: wages, working conditions, social conditions. Given the assertiveness of labor unions in Morocco for holding strikes and their political representation in Parliament, labor unions are influential in affecting worker welfare. The right to association is apparent in firms in this sector.

Yet, Two-thirds of sample firms do not have either labor unions or personnel delegates from workers to management. Other types of labor relation services besides unions could possibly be permitted so that economic and political issues can be separated from employee concerns when appropriate. Methods by which labor concerns are expressed to management needs monitoring for the social welfare benefits it may bring workers, particularly female workers since when some labor-management channel is established, meetings are frequent and a range of topics discussed.

Skills Training Program and Request for Training Services

A variety of questions were asked regarding skills training. A progressive firm provides continuous training or skills upgrading to its employees. Similarly, a firm that trains its new recruits, whatever the degree, at least recognizes the importance of training for improving performance. Of 56 firms, 76.8 percent provide training for new recruits while only 20.7 percent provide skills upgrading or continuous training (n=58). When asked if they favored a system of continuous training, an overwhelming 84 percent said "yes" (n=56).

Firms were asked what kind of technical assistance they would like to receive to improve the performance of their workers. Only 5.5 percent said no technical assistance was desired. Responses to the type of training they would like to receive are classified into four categories so that a firm could request more than one type of technical assistance. For 55 firms who responded, 54.5 percent wanted technical and scientific training; 38.2 percent wanted training in use and maintenance of materials and

equipment, 36.4 percent wanted management, computer, accounting and administrative training. Only 10.9 percent wanted other type of training. Because women play relatively important roles in personnel staff and men dominate the technical cadre, (see below), technical assistance to serve both men and women could respond to both firm needs and provide more balanced gender opportunities *if* they included both technical training of cadres *and* computer and management skills of personnel staff. At least three companies specifically asked for human relations management assistance to address worker issues.[2]

Directors were also asked who ought to receive training. Training of laborers receives a lower priority than technical cadre, but were not excluded from receiving training. Only 25 percent of firms were in favor of training seasonal laborers, 39.3 percent in favor of training permanent laborers but 62.5 percent of firms favored training of technical cadre and directors. About 38 percent of firms desired training of administrative personnel.

TABLE 13

DIRECTOR'S PREFERENCE FOR SKILLS TRAINING BY EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL INDUSTRIAL UNITS: 1992-93

Employment Position	Percent in Favor	n
Technical Cadre & Directors	62.5	56
Administrative Personnel	37.5	56
Permanent Workers(Laborers)	39.3	56
Seasonal Workers(Laborers)	25.0	56
Prefers some training takes place	83.9	56

Three firm directors did not respond.

Directors were also asked if they preferred a suggested type of training program for their employees. Out of the 47 firms who wanted training, only 4 did not respond to the question of whether they favor the specific type of training approach mentioned. The most favored approach was that employees be trained by specialized training organizations. About 41 percent preferred training by specialized training organizations. Only 28 percent of directors preferred that their employees be trained by on the job training in a similar subsector enterprise and 18 percent of directors preferred that training be done by on the job training within the firm through furnishing materials to the firm (see Table 14). For improving social welfare of employees, both male and female, assistance needs to be given to link specialized training organizations to firms and to sensitize directors to the importance of offering training at all staff levels and to both males and females.

[2] Three companies are in olive and olive oil processing in the Meknes/Fez Region, where there is a broader distribution of female employees among staff and workers.

TABLE 14

DIRECTOR'S PREFERENCE FOR TYPE OF SKILLS TRAINING PROGRAM IN POST-HANDLING HORTICULTURAL INDUSTRIAL UNITS: 1992-93

Type of Training Program	Percent in Favor	n
Specialized training organizations	40.5	42
Job training in similar type firm	27.9	43
training by furnishing materials	18.2	43
Other type of training	18.6	43

Out of the 47 firms who wanted training, 4 firms did not usually respond to whether they would like to receive the types of training proposed.

SUMMARY

This section addressed institutional and organizational characteristics of the sample firms and some key backward and forward linkage issues with respect to export trade and to raw product availability. Several gender sensitive monitoring indicators have been recommended for tracking private sector competitiveness, employment creation and social welfare improvement issues within agribusiness export promotion assistance. Specifically addressed were types of social and human services currently existing and kinds of training, if any, firms would like to receive to improve worker performance.

Of note is that most firms are wholly owned Moroccan private firms with incipient integration evident; firms within this sector transform a diversity of products besides their principal economic activity, particularly firms engaged in canning, yet tend to be either focused on processing or on packing for export. The sampled post handling horticultural units export a considerable amount of spices (fresh and dried) and condiments, particularly capers and cornichons, as secondary or tertiary economic activities. These secondary or tertiary activities contribute not only to total sales but also to the regularity of seasonal employment, notably of females. Seasonal labor requirements hence need monitoring by firm as well as by product because of the employment impact on workers.

Most firms buy raw products from the region of their installation. Guarantee of raw products for transformation, however, is not assured more than 60 percent in most commodity activities, except flower and citrus packing units. Employment opportunities for seasonal workers is likely affected by the lack of guarantee of products and investments in welfare of workers a secondary consideration when there is little guarantee that full utilization of production capacity can be assured each season.

Some firms, notably *primeur* and citrus packing units, expect to increase their export trade next year. Processors of olives and olive oil expect to increase olive processing but not olive oil exports. These units, however, note difficulty in product acquisition and use a large amount of labor. Female labor is more important in processed olives while male labor dominates in olive oil production. This trend could be monitored for its impact on employment by gender.

Labor costs play a minor role in total production costs, averaging 14 percent of production costs. Low labor costs is not necessarily a result of employing female workers as seasonal workers. Labor costs are second highest in spice processing units where 86.8 percent of employees are seasonal workers and 80 percent of them female. Lowest labor costs are found among *primeur* packing units where 90.8 percent of employees are seasonal and 76 percent of them female. The proportion of permanent status employees may be a greater factor affecting labor costs. What percent are female in the various occupational positions of permanent status employees may be a factor to monitor for women's employment generation as development assistance to firms increases the firms guarantee of raw products and export markets.

Considerable variability exists among *primeur* packing units. It is difficult to assess relationships among total sales, total investment, total production costs, and labor costs without undertaking additional studies using multi-variate analysis. Further firm studies analyzing the effects of these and other institutional factors on percent of the female labor force and proportion of workers in permanent positions would be better able to assess what incremental changes are likely to result from improvements in specific institutional factors.

Mechanization is planned by 60.3 percent of the firms. It appears that reducing labor is a complementary factor in technology orientation and needs careful monitoring for its likely impact on reducing the number of seasonal employees.

The right to organize exists and more than a third of firms have labor unions or worker delegates who discuss worker issues with management. Only 23.7 percent or 14 firms have labor unions, which are organizationally stronger in dealing with management than personnel delegates. There are, on average, four meetings per year between staff and labor unions, indicating that communication takes place. Moroccan labor requirements with respect to maternity and paternity leave for permanent staff seem to be met by more than 70 percent of firms, with 83 percent of those firms providing paid leave. Less than 20 percent provide leave for seasonal workers.

Training is recognized as important for labor performance. Specific rather than general training is desired. For women to participate in training programs, it would be important to develop computer and management technical training programs by specialized agencies for personnel staff and administrative and technical cadre as well as scientific training for technical cadre. Otherwise women may not benefit substantially from training programs to be offered under MAPF and occupational mobility for them likely kept minimal.

CHAPTER THREE

EMPLOYMENT CHARACTERISTICS

INTRODUCTION

This section includes employment profiles and factors related to employment generation in three parts. First, employment profiles are prepared for the sector by principal economic activity of the firm. Both tables and graphs depict the differences in employment profiles by types of post-horticultural units by subcommodity and by type of transformation process. Worker supervision burden indicators are provided in the employment profiles. These are calculated by taking the ratio of all laborers to technical cadre and unskilled workers to technical cadre. In the second part, gender labor patterns are indicated by analyses of labor recruitment methods usually used by sample firms, employee turnover by employment status and gender, and extent of worker absenteeism by gender and worker status. The third part looks at seasonality and its effects on employment. Included are seasonal employment profiles by transformation process and commodity subsector to demonstrate gender labor demand throughout the agricultural year. Peak seasons are also discussed.

Employment profiles can be tracked to determine employment impact of changes in each subcommodity type firm as well as by transformation process over time. Using these data, changes can be observed such that an increase or decreases in the proportion of workers, proportion of seasonal employees, proportion of unskilled workers, and proportion of females of each employment status can be monitored and evaluated as export assistance is provided.

EMPLOYMENT PROFILES

Employment profiles are based on 59 firms grouped by principal economic activity in a set of two tables. The first table provides a detailed description of the employment structure by gender, using total employees in each employment position and work status. The second table presents a detailed profile of workers for the subsector, providing total employees and percent of all employees by gender of employee. The dominance of seasonal workers is evident in both tables but varies widely by transformation sector. The proportion of females in various positions varies considerably also by commodity subsector and across regions. The percent of females is notably lower the higher the employment position.

Cadre is considered the prestigious type of employment and constitutes the class of professional workers in executive or high administrative and technical advisory positions. According to the Ministère de l'Equipement de la Formation Professionnelle et de la Formation des Cadres (MEFPFC), the number of females in professional training had increased from 16745 in 1984-85 to 27073 in 1989-90, an increase of 61.7 percent. The number of females in 1989-90 reported as receiving professional training in agriculture is 629 (2.3 percent); only 7.7 percent of the 2081 students being trained for cadre positions in commerce and services are female.[3]

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[3]*Direction de la Statistique, CERED. Femme et Developpement Au Maroc*, Tables 4 and 5, pg. 93 and 94, 1992.

A small number of cadre, noted in all but wine processing firms, suggests that technical cadre carry out diverse responsibilities. Technical agribusiness training programmed for them thus needs to be broad-based. A focus on females now working as technical cadre, directors or managers also suggest that concerted effort should be made to assure they receive access to training since so few women now hold these choice positions. Indeed, having a small number of females working as cadre in all type firms whether technical or administrative may be a deterrent to improving worker productivity and firm performance. Recent studies indicate that gender affects which approaches are used to solve problems, approaches to technology choice, and work place organization (Carr, 1992). That a balance of male and female cadre is promoted under MAPP could thus become an economic asset to firms, seldom realized by traditionally male oriented firms and traditional business training programs which are male managed. The MAPP and other development projects will need to address this limited gender pool issue through business program development and programs to encourage more females to enter the agro-industrial sector.

Two types of supervision ratios are prepared. The first is the ratio of all laborers to technical cadre and the second, unskilled to technical cadre. These ratios are indicative of the supervision burden of the technical cadre. Depending on the degree of mechanization within a firm, in general supervision is best when there are fewer than 30 workers in a non-mechanized environment and 60 in a more mechanized environment.

Better worker monitoring is a factor important for improving work performance of unskilled and daily laborers who have no commitment to the firm. Lower ratios indicate better supervision. These ratios can be compared with firms engaged in similar activities in other countries where enterprises are at a similar technical stage of development to compare production results. These ratios can also be used as "red flags" when level of firm mechanization is taken into account. That is, higher ratios would suggest low firm supervisory capacity. Ratio changes over time can be used to determine whether their reduction increases productivity sufficiently to bear the extra cost of employing more technical cadre, a labor cost as noted earlier that significantly affects firm production costs.

EMPLOYMENT PROFILES FOR POST-HARVEST HORTICULTURAL FIRM SAMPLE

Employment profiles are presented for the total sample in Table 15 and 16. Table 15 displays the occupational positions of workers and gender of persons holding these positions. There are 90 directors, of whom 5.6 percent are female; 138 administrative cadre and 140 technical cadre, of whom 9.4 percent and 7.1 percent, respectively, are positions held by females. There are more personnel staff, 314 of whom 42.4 percent are female. Skilled labor force positions are both permanent and seasonal. Slightly more than two times the number of skilled employees work in permanent positions than seasonal ones, 986 and 436, respectively. The percent of females holding skilled seasonal positions however is 28.9 percent, compared to only 3.7 percent holding permanent skilled worker positions. The largest number of employees work in unskilled positions. A total of 9112 are seasonally employed and 1581 permanently employed. Similarly, women comprise 74 percent of the seasonal unskilled labor force and only 46.4 percent of the permanent unskilled work force.

The average number[4] of seasonal unskilled workers is 94.5 per firm compared to 13.5 for permanent unskilled workers. The average number of skilled workers per firm among the permanent labor force is 15.5 and only 4.2 among seasonal workers. Personnel staff average about 2.7 per firm and administrative and technical cadre around 2 each. There is on average only 1 manager. It is thus evident that female employment among laborers is affected both by permanency of work and by the nature of the work (skilled or unskilled).

With respect to staff positions, women are most often employed in personnel positions (42.4 percent). Females are least often found in administrative cadre positions, with an average less than 1 (0.6) per firm. Women seldom hold positions as managers/directors or as technical cadre either (5.6 percent and 7.1 percent, respectively.) Among male technical cadre, the average per firm is only 2.2 persons. In general, firms employ few technical cadre. Persons working in this position perform diverse tasks, have multiple responsibilities, and certain privileges not provided to workers. The standard deviation within each category indicates high variability among firms within sectors with respect to employment structure. Size of firm may be one factor affecting the variability to be further studied in providing benchmark profiles.

The mean number of employees per firm is 70.6. Male employees average 25.3 and female employees, 99.8. More women are in personnel staff posts than men. The mean number of permanent employees by gender differs little, 15.3 for male permanent employees and 11.9 for female permanent employees. This is not the case for seasonal employees. A higher average number of females than males is hired. 104 compared to 33.6. Women are 72 percent of seasonal workers and 70 percent of unskilled workers. About 84 percent of all employees are unskilled and 75 percent are seasonally employed.

Supervisory ratios include the ratio of the number of workers (skilled and unskilled) to technical cadre, and of the number of unskilled workers to technical cadre. In general, it is expected that unskilled workers would need greater overall supervision by technical cadre for improving their work performance than skilled workers. Technical cadre have many responsibilities in addition to monitoring of workers' performance and worker conditions. In most industrial units with line operations, there are floor, group or line foreman who directly supervise line operations. Given societal preferences to relate more to persons of one's own gender and the time constraint of technical cadre on direct worker supervision, it is unlikely that female workers receive the same supervision as male workers even though men can and do supervise women.

The average number of workers supervised by a technical cadre is 86.5. It is 76.4 for the average number of unskilled workers supervised by a technical cadre. These are not abnormally high in general for industrial units with some mechanization. They do indicate tremendous demand on technical cadre for monitoring worker performance.

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[4] The mean number of employees is calculated by weighing the average number of employees in each occupation position by the proportion of employees in that position.

Employment Profiles in All Agro-Industrial Sampled Units

TABLE 15

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS
ALL INDUSTRIAL UNITS, 1992-93 (n=59)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Category	Category as % of Workforce
Directors (managers)	85	5	90	5.6	0.7
Administrative cadres	125	13	138	9.4	1.1
Technical cadres	130	10	140	7.1	1.1
Personnel staff	181	133	314	42.4	2.4
Permanent: skilled	950	36	986	3.7	7.7
unskilled	848	733	1581	46.4	12.4
Seasonal: skilled	310	126	436	28.9	3.4
unskilled	2387	6725	9112	73.8	71.2

TABLE 16

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
ALL INDUSTRIAL UNITS, 1992-93 (n=59)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	5016	100.0	7781	100.0	12797	100.0	60.8
permanent	1798	35.8	769	9.9	2567	20.1	30.0
seasonal	2697	53.8	6851	88.0	9548	74.6	71.8
unskilled	3235	64.5	7458	95.8	10693	83.6	69.7
Supervision Ratio							
permanent & seasonal/techni.					86.5		
unskill/techni.					76.4		

EMPLOYMENT PROFILES BY TYPE OF SUBCOMMODITY SECTOR

Within the two broad clarifications of post-harvest handling units there is considerable variability in employment profiles. In the majority of the processing units, the traditional dominance of men in staff positions and women as seasonal unskilled workers is apparent. In contrast, in wine processing, there are low percentages of seasonal workers, almost no women seasonal employees, and women are a higher proportion of personnel and administrative staff than in the other sub-sectors.

Women are employed more evenly in staff and worker positions in the flower industry. However, even in this relatively young subsector, the percent of women in each post seldom is more than 25 percent. Among *primeur* packing units, women employees are employed as personnel staff or as unskilled seasonal workers, showing the dominance of males in this important sector.

Employment Profile in Processing Post-Harvest Activities

The following eight tables provide employment profiles by subsectors. Four give detailed profiles and four more detailed description of the worker sector and supervision ratios.

Tables 17 and 18 present the employment structure in fruit and vegetable processing units. The average number of directors is 1; administrative cadre, 4; technical cadre, 4.5; personnel staff, 5; skilled permanent workers, 9.9; unskilled permanent workers, 11; skilled seasonal workers 18.4; and unskilled seasonal workers 130.9. There are no female directors, administrative or technical cadre. Forty-one percent of personnel posts are held by females; 17.9 percent hold skilled permanent worker posts and 42.6 percent hold unskilled permanent posts. Indeed, females hold 36.4 percent of skilled seasonal worker posts and 68.2 percent of unskilled seasonal worker posts.

Tables 19 and 20 present employment profiles in olive and olive oil processing units. There are, on average, 1.3 managers, 2.5 administrative cadre, 3.8 technical cadre, 2.5 personnel staff, 19.3 skilled permanent workers, 38.1 unskilled permanent workers, 2.5 skilled seasonal workers and 118.7 unskilled seasonal workers. The percent of females in staff positions is higher in these units than in fruit and vegetable processing units. The percent of females as managers is 11.5 percent; as administrative cadre, 8.5 percent; as technical cadre, 15.6 percent; and, as personnel staff, 65.3 percent.

Tables 21 and 22 present the employment structure in the spice and condiment processing units sampled. For these units, the employment structure is less pyramid shaped. There is on average, 2.5 directors, 1.2 administrative cadre, 1 technical cadre, 3.1 personnel staff, 4.5 skilled permanent workers, 22.9 unskilled permanent workers, 4.5 skilled seasonal workers and 227.9 unskilled seasonal workers. The percent of females employed in each position also is different from the other two types of processing units. There are no females as directors, technical cadre, skilled permanent or seasonal workers. Among administrative cadre, 25 percent are female. Among personnel staff, 87.5 percent are female; and among unskilled permanent workers, 25.7 percent. The percent rises to 81.1 percent among unskilled seasonal workers.

The average number of male permanent workers is 24.5. The average number of female permanent workers, 9.5. Among seasonal workers, there are five times more female seasonal workers than men. On average, the number of female seasonal workers is 266.5 and male seasonal workers, 58.1.

Overall supervisory ratios are high. The ratio of all workers to technical cadre is 374:1 and all unskilled workers to technical cadre, 365.5:1.

Tables 23 and 24 present the employment structure in wine processing units sampled. Wine processing units have a different employment structure from other processing units with more staff hired in permanent posts. On average, there are 3 directors, 5.4 administrative cadre, 6.7 technical cadre, 14.8 personnel staff, 90.7 permanent skilled workers, 31.1 unskilled permanent workers, 25 skilled seasonal workers and 23.8 unskilled seasonal workers. Females are proportionally less represented among workers and among seasonal workers than in any other processing unit. No females are directors. No females are in skilled seasonal worker posts. The proportion of females in the other positions is: administrative cadre, 20.8 percent; technical cadre, 4.5 percent; personnel staff, 40.7 percent; skilled permanent workers, 1.8 percent, unskilled permanent workers, 4.0; and unskilled seasonal workers, 9.3 percent.

The average number of permanent employees who are male is 76.8. This number declines to an average of 1.5 for females. The average number of seasonal workers is 25.5 for male workers and only 2.7 for female workers. Unskilled worker averages are similar, 29.5 and 2.2, respectively.

Supervision ratios are also much lower. The ratio of all workers to technical cadre is 24.7:1. The ratio of all unskilled workers to technical cadre, 8.5:1. Essentially no difference exists between male and total supervisory ratios because so few females are employed.

Summary

When preparing future human resource development initiatives in processing horticultural post handling units both employment structure and the gender of the employee in that position will need to be taken into account in order to tailor programs and services to the specific needs of the employees, such as access to maternal health and family planning services.

The lowest percent of women among workers is found in wine processing. The highest proportion of female unskilled laborers are in spices and condiments processing. Among personnel staff, the lowest percent of females is 40.7 percent in wine processing, the highest is in the spice sector, 87.5 percent. Only 1 percent of all employees are hired as personnel staff however in these units.

Among technical and administrative cadre and directors, the highest proportion of females working as technical cadre is 12.5 percent, in olive and olive oil processing units. The highest proportion of females hired as administrative cadre is 25 percent, in the spice and condiment subsector. The only subsector with females present as directors or managers is in olives and olive oil processing units. With respect to total employees, permanent employees are also greater in wine processing units. The least is in processing of fruits and vegetables and in spices, both with about 11 percent of their workers in permanent jobs. The percent of women among permanent employees also varies. Overall, about 30 percent of the permanent workers are women, but it varies from 38.6 percent in olives and olive oil to 2.3 percent in wine processing units.

Employment Profiles in Processing: Fruits and Vegetables

TABLE 17

EMPLOYMENT PROFILES IN POST-HANDLING UNITS
PROCESSING: FRUIT AND VEGETABLE CONSERVES, 1992-93 (n=6)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	6	0	6	0	0.3
Administrative cadres	24	0	24	0	1.3
Technical cadres	27	0	27	0	1.4
Personnel staff	34	24	58	41.4	3.0
Permanent: skilled	69	15	84	17.9	4.4
unskilled	74	55	129	42.6	6.7
Seasonal: skilled	131	75	206	36.4	10.7
unskilled	440	945	1385	68.2	72.2

TABLE 18

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
PROCESSING: FRUIT AND VEGETABLE CONSERVES, 1992-93 (n=6)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	805	100.0	1114	100.0	1919	100.0	58.1
permanent	143	17.8	70	6.3	213	11.1	32.9
seasonal	571	70.9	1020	91.6	1591	82.9	64.1
unskilled	514	63.9	1000	89.8	1514	78.9	66.1
Supervision Ratio							
permanent & seasonal/techni.					66.8		
unskill/techni.					56.1		

Employment Profiles in Processing: Olives and Olive Oil

TABLE 19

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: OLIVES AND OLIVE OIL, 1992-93 (n=16)

Employment Position and Work Status	Male Employees	Female Employees	All Employee		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	23	3	26	11.5	0.7
Administrative cadres	43	4	47	8.5	1.2
Technical cadres	35	5	40	12.5	1.1
Personnel staff	25	47	72	65.3	1.9
Permanent: skilled	322	15	337	4.5	9.0
unskilled	498	618	1116	55.4	29.6
Seasonal: skilled	52	36	88	40.9	2.3
unskilled	389	1652	2041	80.9	54.2

(Includes MACROCAPRES which processes more capers than olives and Huilerie Talbi which produces more carob than olive oil.)

Editor's note: Corrections were made in the final version of this table based on previous calculations rather than raw data.

TABLE 20

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: OLIVES AND OLIVE OIL, 1992-93 (n=16)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	1387	100.0	2380	100.0	3767	100.0	63.2
permanent	820	59.1	633	26.6	1453	38.6	43.6
seasonal	441	31.8	1688	70.9	2129	56.5	79.3
unskilled	887	64.0	2270	95.4	3157	83.8	71.9
Supervision Ratio							
permanent & seasonal/techni.					89.6		
unskill/techni.					78.9		

(Includes MACROCAPRES which processes more capers than olives and Huilerie Talbi which produces more carob than olive oil.)

Editor's note: Corrections were made in the final version of this table based on previous calculations rather than raw data.

Employment Profiles in Processing: Spices and Condiments

TABLE 21

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: SPICES AND CONDIMENTS, 1992-93 (n=2)[1]

Employmcnt Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	5	0	5	0	0.7
Administrative cadres	3	1	4	25.0	0.5
Technical cadres	2	0	2	0	0.3
Personnel staff	1	7	8	87.5	1.0
Permanent: skilled	8	0	8	0	1.0
unskilled	55	19	74	25.7	9.7
Seasonal: skilled	9	0	9	0	1.2
unskilled	124	533	657	81.1	85.6

[1] This excludes MACROCAPRES which produces more capers than olives and Huilerie Talbi which produces more carob than olive oil.

TABLE 22

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: SPICES AND CONDIMENTS, 1992-93 (n=2)[1]

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	207	100.0	560	100.0	767	100.0	73.0
permanent	63	30.4	19	3.4	82	10.7	23.2
seasonal	133	64.3	533	95.2	666	86.8	80.0
unskilled	179	86.5	552	98.6	731	95.3	75.5
Supervision Ratio							
permanent & seasonal/techni					374.0		
unskill/techni.					365.5		

[1] This excludes MACROCAPRES which produces more capers than olives and Huilerie Talbi which produces more carob than olive oil. Female supervisory ratios are 0 due to no female technical cadre.

Employment Profiles in Processing: Wine

TABLE 23

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: WINE, 1992-93 (n=3)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	9	0	9	0	1.3
Administrative cadres	19	5	24	20.8	3.5
Technical cadres	21	1	22	4.5	3.2
Personnel staff	51	35	86	40.7	12.6
Permanent: skilled	277	5	282	1.8	41.2
unskilled	97	4	101	4.0	14.7
Seasonal: skilled	75	0	75	0	10.9
unskilled	78	8	86	9.3	12.6

TABLE 24

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS PROCESSING: WINE, 1992-93 (n=3)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	627	100.0	58	100.0	685	100.0	8.5
permanent	374	59.6	9	15.5	383	55.9	2.3
seasonal	153	24.4	8	13.8	161	23.5	5.0
unskilled	175	27.9	12	20.7	187	27.3	6.4
Supervision Ratio							
permanent & seasonal/techni.					24.7		
unskili/techni.					8.5		

Employment Profiles in Packing Units and Fruit and Vegetable Cold Storage

Tables 25 through 32 present employment profiles for the three types of packing units and cold storage units sampled. Citrus packing unit employment profiles are presented in Tables 25 and 26. The average number of directors per firm is 1.5; administrative cadre, 2.8; technical cadre, 2.4; personnel staff, 2.6; skilled permanent workers, 9.5; unskilled permanent workers, 4.2; skilled seasonal workers, 2.9; and unskilled seasonal workers, 131.4. While females are hired in all posts, except that as manager, their presence is felt only in personnel staff and unskilled seasonal worker posts. The percent of females holding administrative cadre posts is 5 percent; it is 3.8 percent among technical cadre; 22.5 percent among personnel staff; 1 percent among skilled permanent workers; 2.3 percent among unskilled permanent workers; 8.6 percent among skilled seasonal workers; and 67.6 percent among unskilled seasonal workers.

The average number of male permanent staff per firm is 8 and less than 1 for females. The average number of female seasonal workers is double that of male seasonal workers, 157.8 compared to 73 employees per firm. Similar averages are found for unskilled workers, 158 and 72.1, respectively, indicating that most seasonal workers are unskilled. The overall supervision ratios are 96.8 and 91.7 for number of workers and number of seasonal workers to supervise for one technical cadre. Given higher mechanization in citrus packers, these ratios are acceptable but not optimal.

Tables 27 and 28 present employment profiles in *primeurs* packing units. These units are in general of small size than processing units, and on average employ nearly 2.5 times fewer people than citrus packing units. the average number of directors is 1.1 with less than 1 administrative and technical cadre employed (0.4 and 0.5, respectively). The average number of personnel staff is 1.2; skilled permanent workers, 3.1; unskilled and skilled seasonal workers less than 1 (0.1 and 0.1, respectively). The average number of unskilled seasonal workers is 50.1. There are few women in most posts in *primeurs* packing units. Females are employed only in personnel and unskilled seasonal worker posts, where the percent of females is 17.4 percent and 76.1 percent, respectively.

There are no permanent female employees in these sample firms. The average number of male permanent employees is also only 2.5. The average number of female seasonal workers and female unskilled workers is the same, 60 per firm. The average number of male seasonal workers is 18.8 and 17.6 for male unskilled workers. Supervisory ratios are high, given the size of the unskilled seasonal work force. The ratio of all workers to technical cadre is 166.9:1 and for unskilled workers to technical cadre, 160.6:1. Since no females are employed as technical cadre, these ratios are zero.

Tables 29 and 30 present the employment structure of flower packing units. These units, on average, employ more skilled employees than either citrus or *primeurs* packing units. The average number of directors and average number of administrative cadre is the same, 1.2 per firm. The average number of technical cadre is 1.3; personnel staff, 1.4; skilled permanent workers, 18.2; unskilled permanent workers, 6.7; skilled seasonal workers, 2.2; and unskilled seasonal workers, 55.6. Unlike in *primeur* packing units, females are more distributed throughout posts. A larger number of females are also hired as technical cadre in these flower packing units. The only post in which women are not hired is the permanent skilled worker post. The percent of females holding specific posts is the following: directors, 12.5 percent; administrative cadre, 22.2 percent; technical cadre, 27.3 percent; personnel staff, 27 percent; unskilled permanent staff, 21.6 percent, skilled seasonal staff, 54.5 percent and unskilled seasonal staff, 83.1 percent.

There are only 11 females in permanent posts compared to 131 males, hence the average number of females employed in these posts is less than one and the average number of males, 15.1. The average number of seasonal female workers or unskilled workers is the same (59.1 and 59.2, respectively). The average number of male seasonal workers is 32.4 and the average number of unskilled male workers is 29.2. Given the quality control required in flower packing, supervisory ratios suggest that technical cadre may have a difficult time. The number of workers relative to technical cadre is 106.7:1 and unskilled workers to technical cadre, 96.4: 1.

Tables 31 and 32 present the employment structure in cold storage units sampled. As in other units, there more unskilled workers than other employees in other posts. Given the technical nature of managing cold storage units and the occasional packing activities they engage in, it is not surprising that they have on average, more technical cadre than the other packing units sampled. The average number of directors per firm is 1.4; administrative cadre, 1.3; technical cadre, 4.1; personnel staff, 4.1; skilled permanent workers, 14.7; unskilled permanent workers, 7.6; and unskilled seasonal workers, 91. There are no skilled seasonal workers reported to be working in these firms. Among these cold storage units, females only hold director, personnel staff, unskilled permanent worker and unskilled seasonal worker positions. Among directors, 16.7 percent are females. Among personnel staff, 28.6 percent are female. The percent of females is more in unskilled posts: 55.6 percent in unskilled permanent posts and 66.9 percent in seasonal unskilled posts.

There are fewer differences among packing and fruit and vegetable cold storage firms, except for the newer sector: flower packing units. All have a large number of unskilled seasonal workers with the highest proportion found in flower packing units (83.1 percent) and the lowest in cold storage units for fruits and vegetables (66.9 percent). The percentage of females employed as administrative cadre also ranges from 27 percent in flower packing units to 17.4 percent in *primeur* packing units. A wider distribution of females also exists throughout the employment structure. The percent of female technical cadre is 3.8 percent in citrus packing units and 27.3 percent in flower packing units. No female technical cadre are found in *primeurs* packing units or in fruit and vegetable cold storage units. Women are usually employed as unskilled seasonal workers or in personnel staff posts.

Employment Profiles in Packing: Citrus

TABLE 25

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS
PACKING: CITRUS, 1992-93 (n=10)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	15	0	15	0	0.6
Administrative cadres	19	1	20	5.0	0.8
Technical cadres	25	1	26	3.8	1.0
Personnel staff	31	9	40	22.5	1.5
Permanent: skilled	96	1	97	1.0	3.7
unskilled	43	1	44	2.3	1.7
Seasonal: skilled	32	3	35	8.6	1.3
unskilled	759	1581	2340	67.6	89.4

[pace] Souls is included under Packing: Primeurs, although citrus tonnage is higher than of primeurs.

TABLE 26

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
PACKING: CITRUS, 1992-93 (n=10)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	1020	100.0	1597	100.0	2617	100.0	61.0
permanent	139	13.6	2	0.1	141	5.4	1.4
seasonal	791	77.5	1584	99.2	2375	90.7	66.7
unskilled	802	78.6	1582	99.1	2384	91.1	66.4
Supervision Ratio							
permanent & seasonal/techni.					96.8		
unskill/techni.					91.7		

[pace] Souls is included under Packing: Primeurs, although citrus tonnage is higher than of primeurs.

Employment Profiles in Packing: Primeurs

TABLE 27

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS
PACKING: PRIMEURS, 1992-93 (n=14)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	15	0	15	0	1.2
Administrative cadres	6	0	6	0	0.5
Technical cadres	7	0	7	0	0.6
Personnel staff	17	3	20	15.0	1.6
Permanent: skilled	43	0	43	0	3.6
unskilled	21	0	21	0	1.7
Seasonal: skilled	1	0	1	0	0.1
unskilled	264	839	1103	76.1	90.7

[pace] Souls is included under Primeurs; although a higher citrus tonnage exporter, it is a high tonnage primeur exporter.

TABLE 28

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
PACKING: PRIMEURS, 1992-93 (n=14)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	374	100.0	842	100.0	1216	100.0	69.2
permanent	64	17.1	0	0	64	5.3	0
seasonal	265	70.9	839	99.6	1104	90.8	76.0
unskilled	285	76.2	839	99.6	1124	92.4	74.6
Supervision Ratio							
permanent & seasonal/techni.					166.9		
unskill/techni.					160.6		

[pace] Souls is included under Primeurs; although a higher citrus tonnage exporter, it is a high tonnage primeur exporter.

Employment Profiles in Packing: Flowers

TABLE 29

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS
PACKING: FLOWERS, 1992-93 (n=5)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	7	1	8	12.5	0.7
Administrative cadres	7	2	9	22.2	0.7
Technical cadres	8	3	11	27.3	0.9
Personnel staff	7	2	9	22.2	0.7
Permanent: skilled	91	0	91	0	7.5
unskilled	40	11	51	21.6	4.2
Seasonal: skilled	10	12	22	54.5	1.8
unskilled	171	839	1010	83.1	83.4

TABLE 30

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
PACKING: FLOWERS, 1992-93 (n=5)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	341	100.0	870	100.0	1211	100.0	71.8
permanent	131	38.4	11	1.3	142	11.7	7.7
seasonal	181	53.1	851	97.8	1032	85.2	82.5
unskilled	211	61.9	850	97.7	1061	87.6	80.1
Supervision Ratio							
permanent & seasonal/techni.					106.7		
unskill/techni.					96.4		

Employment Profiles in Packing: Cold Storage

TABLE 31

EMPLOYMENT PROFILES IN POST-HANDLING HORTICULTURAL UNITS
COLD STORAGE UNITS, 1992-93 (n=3)

Employment Position and Work Status	Male Employees	Female Employees	All Employees		
	Number	Number	Number	% Female in Position	Position as % of Workforce
Directors (managers)	5	1	6	16.7	1.0
Administrative cadres	4	0	4	0	0.7
Technical cadres	5	0	5	0	0.8
Personnel staff	15	6	21	28.6	3.4
Permanent: skilled	44	0	44	0	7.1
unskilled	20	25	45	55.6	7.3
Seasonal: skilled	0	0	0	0	0
unskilled	162	328	490	66.9	79.7

TABLE 32

EMPLOYMENT POSITION IN POST-HANDLING HORTICULTURAL UNITS
COLD STORAGE UNITS, 1992-93 (n=3)

Employment Position	Male Employees		Female Employees		Total Employees		
	Number	% of Male Employee	Number	% of Female Employee	Number	% of all Employee	Female as % Position
Total Employees	255	100.0	360	100.0	615	100.0	58.5
permanent	64	25.1	25	6.9	89	14.4	28.1
seasonal	162	63.5	328	91.1	490	79.7	66.9
unskilled	182	71.4	353	98.1	535	87.0	66.0
Supervision Ratio							
permanent & seasonal/techni.					115.8		
unskill/techni.					107.0		

SEASONALITY AS EMPLOYMENT FACTOR

Figures 1 to 7 provide profiles of seasonal workers by type of post-harvest activity and commodity type for the agricultural year, 1991-92. The peaks and troughs for seasonal employment in processing activities are different from those of packing and cold storage units. If Figure 1 is compared with Figure 6, the months when there is low demand for work in packing units are the months of high demand for working in processing units. The months of greatest seasonal employment opportunities in packing units are also the months of low demand in processing units for seasonal workers. The only exception appears to be during November. At this time, processing is still fairly active while citrus and *primeurs* packing units are starting to gear up for the European early seasonal windows.

Labor demand is different for male and female seasonal workers. For example, the two most important months for seasonal employment for females are June and December. In June 1992, the total number of female seasonal workers is 4681. In December 1991, 4486 females are employed as seasonal workers in all post harvest horticultural units. Slow months for seasonal work reported by our sample firms differs between females and males. For females least demand is in March and April. Only 3035 female seasonal workers are reported employed in March 1991 and 2808 in April 1991.

November is the month in which the labor demand for male seasonal workers is greatest. In November 1991, 2145 males are reported employed as seasonal workers in processing, packing and cold storage units. The least demand for male seasonal workers appears to be in August. Only 832 males are reported employed as seasonal workers in August 1991.

Labor demand is affected by type of post-harvest activity. June and July are usually active months for fruit processing. November through January are usually active months for citrus and *primeurs* exports. In June 1992, 4416 male and female workers report working in processing units. The lowest demand for seasonal work reported by processing firms is during March. In March 1992, only 1227 persons are reported employed in seasonal worker posts.

Among packing and cold storage units, the month of the highest demand for seasonal workers is January. In January 1992, 4973 seasonal workers are employed in these units. August is practically a month of closure for packing units as there are no women employed reported in citrus, primeurs and flower packing units and barely any men. Hence the lowest labor demand when operations are on-going is in September. Among the 32 packing and cold storage units sampled, the total number of seasonal workers employed in September 1991 is 1476.

In summary, different types of post-harvest activities have different labor demands for seasonal labor as observed in Figures 1 through 6. They also have different lengths of period when they need seasonal workers. Apparent from these data are that male and female seasonal workers have different labor markets. It would be interesting to further pursue this question. Whether there are separate labor pools for each type of subsector or the same labor pool of male and female seasonal workers shift between processing and packing units cannot be determined by enterprise level data. It is an important issue to review, however, since it raises the question of employment creation by lengthening the period in which seasonal laborers who are male and who are female are needed. Since employment histories of seasonal workers can be tracked for both men and women with employee data, this question can be answered in later studies.

FIGURE 1

TOTAL SEASONAL EMPLOYMENT
IN PROCESSING UNITS: 1991-92 ('000)
4500.0
4000.0
3500.0
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
2362
3638
3146
2190
1584
1682
1227
1332
2468
4416
3365
2435
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug

60

FIGURE 2

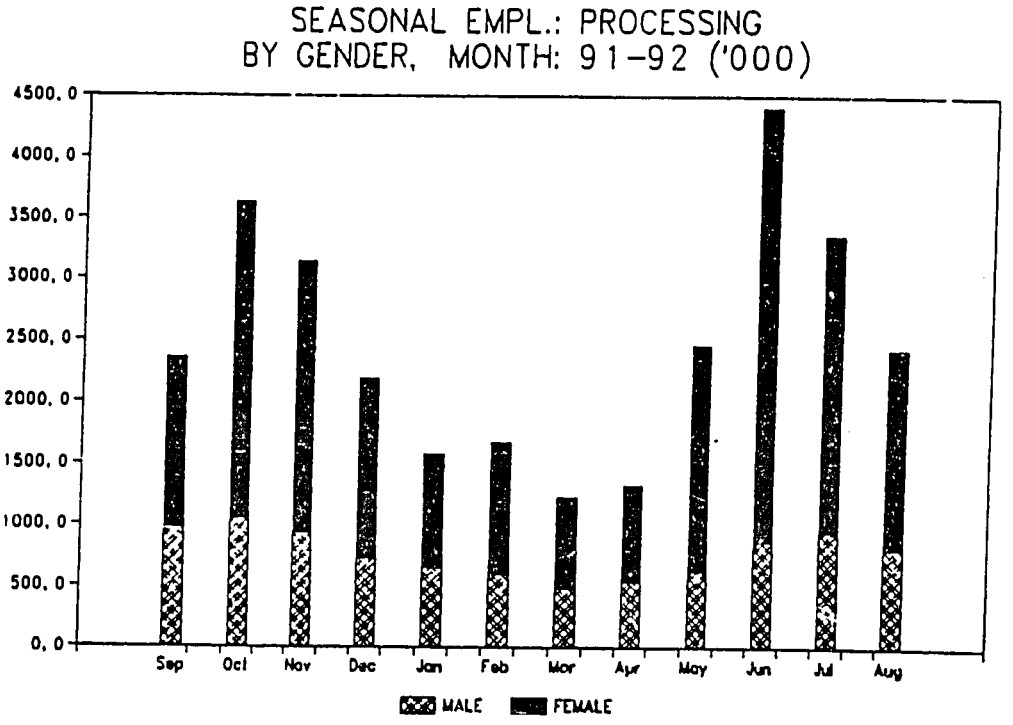

SEASONAL EMPL.: PROCESSING
BY GENDER, MONTH: 91-92 ('000)
4500.0
4000.0
3500.0
3000.0
2500.0
2000.0
1500.0
1000.0
500.0
0.0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
MALE
FEMALE

FIGURE 3

PERCENT FEMALE SEASONAL EMPLOYMENT
BY PROCESSING UNIT TYPE:'91-92

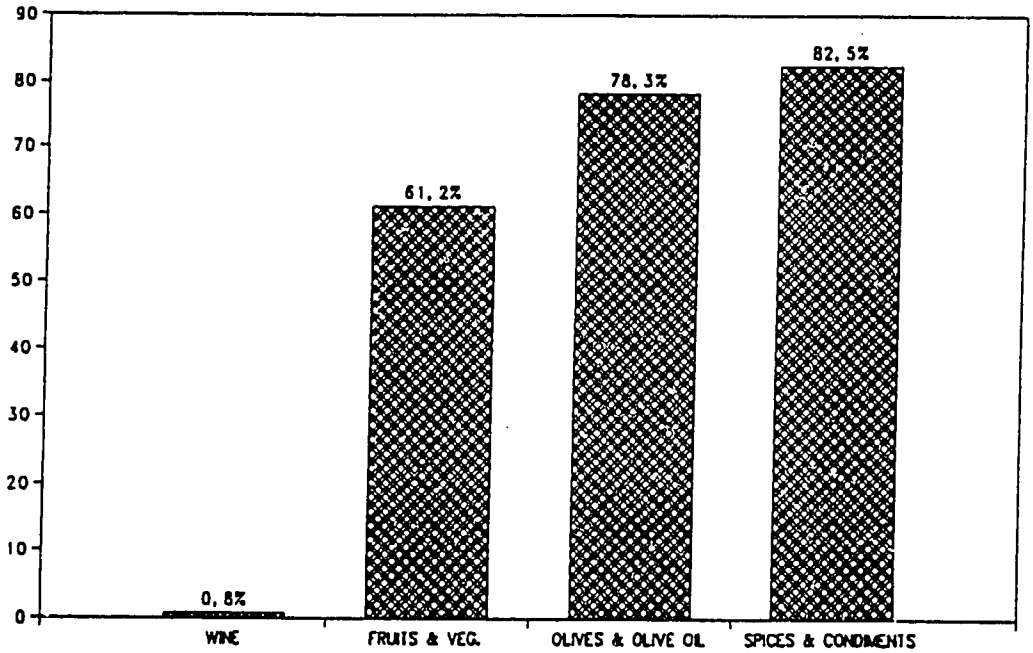


FIGURE 4

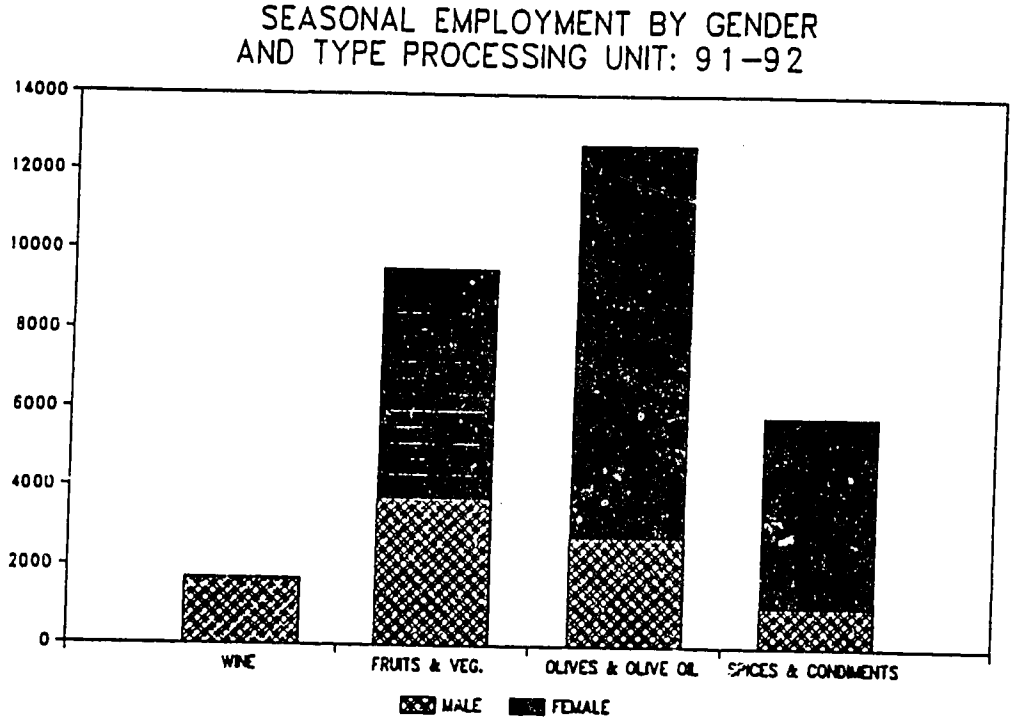

SEASONAL EMPLOYMENT BY GENDER
AND TYPE PROCESSING UNIT: 91-92
14000
12000
10000
8000
6000
4000
2000
0
WINE
FRUITS & VEG.
OLIVES & OLIVE OIL
SPICES & CONDIMENTS
MALE
FEMALE

FIGURE 5

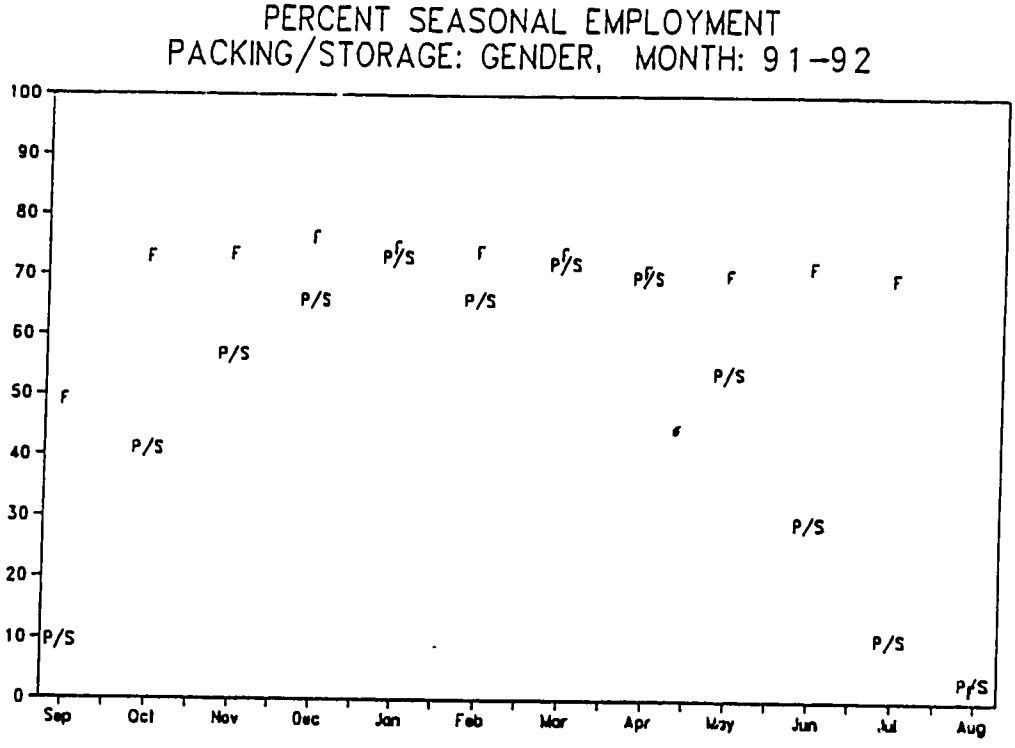
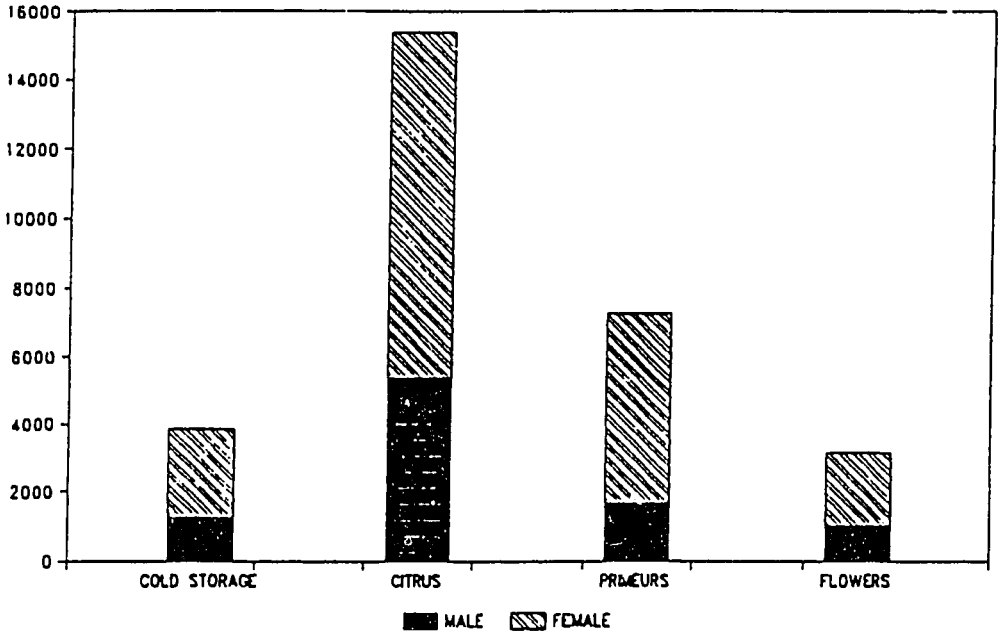

PERCENT SEASONAL EMPLOYMENT
PACKING/STORAGE: GENDER, MONTH: 91-92
100
90
80
70
60
50
40
30
20
10
0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
F
P/S

FIGURE 6

SEASONAL EMPLOYMENT: PACKING
& STORAGE BY GENDER, MONTH: 91-92 ('000)
4500
4000
3500
3000
2500
2000
1500
1000
500
0
Sep
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
Jun
Jul
Aug
MALE
FEMALE

FIGURE 7

TOTAL SEASONAL EMPLOYMENT BY PACKING UNIT, GENDER: 1991-92



Seasonality and Gender Specificity in the Processing Subcommodity Sector

Tables 33 and 35 describe the average number of seasonal workers employed by subcommodity and main post-horticultural activity. Table 33 provides monthly averages of the number of seasonal workers in the four types of processing units and for all post-harvest firms. Table 34 provides monthly averages of seasonal workers in packing and cold storage units. Monthly averages are provided for both male and female seasonal workers.

For all firms, the average number of male seasonal workers is around 26 per firm. The mean ranges from a low of 14.1 in August to a high of 37 in November. The average number of female seasonal workers is 58 ranging from a low of 25 in September to a high of 84.3 in November. Indeed for both males and females, seasonal employment is low in August and September, a period when families are saving money to pay for school fees.

In wine processing units, seasonal employees are almost exclusively male. Only in September 1992, is an average of 3.7 per firm of female seasonal workers reported. The main season for temporary work in this industry is autumn. The highest average number of male seasonal workers employed is in September, 111. In October there was an average of 80.3 male workers and in November the number dropped to 59. This decline continues each month until March, when the least number of male seasonal workers is employed, 21.7.

Among fruit and vegetable processing units, the major season is early and mid summer. The average number of male seasonal workers is highest in July, at 75.8 seasonal workers per firm and continues to be above 50 workers until December. The lowest average number of male seasonal workers is in April, when there is on average 35 male seasonal workers per firm. The number of female seasonal workers is above 50 for 8 months of the year. June is the month of highest employment when on average there are 184.2 female seasonal workers per firm. May the number is 137 and July, 148.3 per firm. The least number of female seasonal workers employed in these processing firms is in December, when there is an average of 28.5 per firm.

In olive and olive oil processing units, male seasonal workers average around 20 in October, November and January, with January the peak month and major month of olive oil processing. The average number of male seasonal workers is 20.6 during January. August is the lowest month closely followed by May, 8.8 and 9 male seasonal workers on average per firm. Female seasonal workers, unlike males, have three periods of employment opportunities. The highest number are employed in August, when capers, a secondary product are processed. The average number of female seasonal workers employed at that time is 320 workers. The next highest average is 113.1 in June when some of these processing units diversify into fruit and vegetable processing. The months of October and November are months of olive canning. The average number of female seasonal employees in October is 97.5 and in November, 92.5. The least attractive month for temporary employment of females is April. There are 28.8 women seasonally employed on average in these processing units during this month.

In spice and condiment processing units, work is highly seasonal with the season starting in May and ending in December. There are no female seasonal workers employed from January to April and only one, on average, male seasonal worker. The number of male seasonal workers is 80 per firm on average from June through August then drops to around 52 in September and October and 42 in November and December. Female seasonal workers are considerably more numerous. In May they average 240 per firm, rise to 320 per firm on average from June through August, drop to 200 in September, climb again in October to 226.5 then decline to 186 in November and 160 in December. These firms on average employ more females and keep the numbers up for a longer period than any other processing type unit.

TABLE 33

AVERAGE NUMBER OF SEASONAL WORKERS BY GENDER AND MONTH: 1991-92
FOR PROCESSING ACTIVITIES IN POST-HARVEST HANDLING UNITS

Month	Gender	Processing Units for Post-Harvest Handling								All Firms (n=59)	
		Wine (n=3)		Fruits & Veg. (n=6)		Olives & Olive Oil (n=16)		Spices & Condiments (n=2)			
		Mean	s	Mean	s	Mean	s	Mean	s	Mean	s
September	Male	111.0	42.0	60.0	128.4	10.9	34.8	51.5	68.6	18.1	52.3
	Female	3.7	3.5	45.0	92.0	44.3	71.6	200.0	282.8	25.0	70.8
October	Male	80.3	9.1	64.7	106.0	19.6	37.0	52.5	67.2	30.9	50.8
	Female	0.7	1.1	95.8	64.7	97.5	90.2	226.5	245.4	72.0	97.9
November	Male	59.0	26.3	58.0	109.2	19.9	37.2	42.5	53.0	37.0	51.5
	Female	0.0	0.0	61.0	49.8	92.5	100.0	186.0	189.5	84.3	94.8
December	Male	40.7	45.0	49.8	103.6	14.1	18.5	41.5	54.4	33.2	46.1
	Female	0.0	0.0	28.5	43.5	60.6	96.8	160.0	226.3	76.0	93.7
January	Male	30.3	33.3	37.5	70.8	20.6	37.3	1.0	1.4	32.8	43.1
	Female	0.0	0.0	40.0	55.0	43.6	62.0	0.0	0.0	66.9	78.9
February	Male	26.0	27.0	40.8	69.2	17.3	30.2	1.0	1.4	28.3	41.5
	Female	0.0	0.0	73.3	80.6	40.0	65.0	0.0	0.0	57.5	67.5
March	Male	21.7	28.5	37.5	70.8	11.6	26.5	1.0	1.4	26.4	39.7
	Female	0.0	0.0	40.0	55.0	31.9	53.9	0.0	0.0	51.4	62.4
April	Male	38.8	37.5	35.0	50.0	12.8	31.1	1.0	1.4	26.0	38.1
	Female	0.0	0.0	56.7	59.3	28.8	54.3	0.0	0.0	47.6	62.5
May	Male	29.0	29.0	45.8	47.2	9.0	30.2	60.0	84.9	26.5	40.3
	Female	0.0	0.0	137.0	149.2	33.8	55.1	240.0	339.4	62.3	96.8
June	Male	28.0	28.5	55.0	39.37	17.9	34.4	80.0	113.1	23.5	41.1
	Female	0.0	0.0	184.2	134.9	113.1	207.4	320.0	452.5	79.3	152.6
July	Male	35.3	39.5	75.8	125.3	13.4	31.6	80.0	113.1	17.4	50.5
	Female	0.0	0.0	148.3	192.6	56.3	63.2	320.0	452.5	44.4	112.6
August	Male	56.3	29.0	56.7	129.1	8.8	29.8	80.0	113.1	14.1	49.6
	Female	0.0	0.0	62.5	94.3	320.0	452.5	320.0	452.5	28.7	92.8

In summary, seasonal work opportunities for males and females differ by commodity subsector. In wine processing units, males are seasonal workers. Their seasonal high is September and low, March. In fruits and vegetables processing units, both male and females are working on average most in July. The lowest month for males is April; for females in December. In the olive and olive oil sector, August is the month, on average for female seasonal workers but the lowest month for male seasonal employment. October, November and January are months of high male seasonal employment. The difference in work seasons is probably due to type of products processed since august is a time of caper processing and January a time of oil processing. In spice processing units, no gender differences seem to appear by season. The highest average months for both male and female seasonal laborers are June, July and August. From January to April basically no activity takes place.

Seasonality and Gender Specificity in the Packing and Fruit and Vegetable Cold Storage Subcommodity Sector

Within packing units, less variation exists among subsectors in average number of workers. Some differences by gender of worker exist. Most variation appears due to the market opportunities for the product being packaged. For example, exports of *primeurs* from December through March enable Moroccan firms to capture early seasonal windows in the European market. December and February are months in Europe when flower sales are especially good due to Christmas and Valentine's Day. When labor is demanded by packing units both male and female workers are employed in a similar pattern.

In citrus packing units, the highest average number of male and female seasonal employees occurs during November with few workers during August and September. The average number of male seasonal workers in November was 79.3; for females it was 167.4 per firm. In August it was less than one for both. The seasonal employment in this sector starts in October and continues at a high level until January when the average number of male seasonal workers remains around 53 and the number of female seasonal workers remains around 83 until May, when it drops to 35.8 male and 63.9 female seasonal workers for June. In July, the average number of male seasonal workers further drops to on average 4.1 male and 7.5 female seasonal workers per firm.

For *primeur* packing units, on average there are 18 male seasonal workers employed from December through March. During the same period there is on average 62 female seasonal workers. From June through September, neither male or female seasonal workers are employed in these packing units.

The flower packing units have steady seasonal employment from December to March. The highest number of male seasonal workers is in December, on average 30.2 per firm. The highest average number of female seasonal workers is found in February, an average of 68.6 per firm. No seasonal employees are hired during July and August when temperatures are too high for good production.

Cold storage units for fruits and vegetables show greater seasonal variation by gender of worker. Seasonal work is highest for male workers in May. On average, there are 53.3 workers per firm although there is steady employment at around 44-7 workers from November through March in these units. The peak labor month for females is June, where on average there are 116 female seasonal workers per firm. Other months of high activity for seasonal work for females are November and December. There are, on average, 93.3 seasonal workers per firm. The most inactive months for seasonal work are August and September. Figure 5 indicates that the percent of females employed throughout the year in packing and cold storage units remains steady even though the proportion of persons engaged in packing to total seasonal employment steady declines from April to August.

TABLE 34

AVERAGE NUMBER OF SEASONAL WORKERS BY GENDER AND MONTH: 1991-92
FOR COLD STORAGE AND PACKING POST-HARVEST HANDLING UNITS

Month	Gender	Cold Storage		Packing Units for Post-Harvest Handling						All Firms (n=59)	
				Citrus		Primeurs		Flowers			
		Mean	s	Mean	s	Mean	s	Mean	s	Mean	s
September	Male	6.7	11.5	2.7	5.3	0.0	0.0	10.0	22.4	18.1	52.3
	Female	23.3	40.4	0.0	0.0	0.0	0.0	3.0	6.7	25.0	70.8
October	Male	6.7	11.5	59.3	52.8	5.6	15.9	16.6	26.2	30.9	50.8
	Female	24.0	41.6	116.7	120.5	18.21	63.9	33.4	60.0	72.0	97.9
November	Male	46.7	64.3	79.3	44.2	14.1	16.1	20.0	24.6	37.0	51.5
	Female	93.3	121.0	167.4	93.8	45.0	62.5	34.2	59.1	84.3	94.8
December	Male	46.7	64.3	68.0	48.5	17.9	13.7	32.0	21.9	33.2	46.1
	Female	93.3	121.0	158.0	105.6	59.5	55.0	66.4	66.8	76.0	93.7
January	Male	44.0	66.1	76.1	47.1	18.2	13.6	28.0	19.5	32.8	43.1
	Female	85.3	126.0	156.3	96.3	61.9	53.9	65.4	67.7	66.9	78.9
February	Male	44.0	66.1	53.5	54.0	17.8	13.7	30.2	23.4	28.3	41.5
	Female	85.3	126.0	84.7	69.2	61.9	53.9	68.6	74.3	57.5	67.5
March	Male	44.3	65.8	53.3	5[illegible].1	18.2	13.6	31.8	22.1	26.4	39.7
	Female	86.7	125.0	83.6	69.4	61.9	53.6	64.6	68.4	51.4	62.4
April	Male	52.3	58.7	53.8	54.1	16.3	15.1	15.2	19.1	26.0	38.1
	Female	97.0	115.2	82.8	66.8	51.3	59.2	34.2	59.2	47.6	62.5
May	Male	53.3	57.8	53.4	54.2	12.2	16.1	14.6	22.1	26.5	40.3
	Female	99.3	113.3	81.2	65.8	40.2	63.2	31.8	60.5	62.3	96.8
June	Male	47.3	63.9	35.8	51.8	0.0	0.0	4.6	10.3	23.5	41.1
	Female	116.0	103.5	63.9	72.0	0.0	0.0	27.8	62.2	79.3	152.6
July	Male	17.3	15.5	4.1	8.6	0.0	0.0	0.0	0.0	17.4	50.5
	Female	39.9	46.1	7.5	23.7	0.0	0.0	0.0	0.0	44.4	126.6
August	Male	6.7	29.0	0.2	0.6	0.0	0.0	0.0	0.0	14.1	49.6
	Female	23.3	40.4	0.0	0.0	0.0	0.0	0.0	0.0	28.7	92.8

In summary, gender specificity of seasonal employment varies by type of commodity and type of process. Gender differences among these firms likely result from gender preference of worker by employers for transforming specific commodities. Spices or condiments for example are generally considered tedious work best undertaken by women, according to one spice firm manager. It is also likely a function of alternative work opportunities for male employees. That male rates are low in June and July is likely due to wheat harvest responsibilities and alternative agricultural labor opportunities. Male seasonal employment may not be substituted for labor demands at planting and harvesting of wheat, not only as a work alternative but also a food security alternative to the male worker and his family. Women laborers seldom have other work opportunities that give them the same social status (eg prostitution or house servant); hence they are likely to shift among firms as daily laborers out of desperation. If more products could be available for longer seasons and particularly in summer months, then workers might be able to specialize in one type of processing activity, a specialization that may help them improve their work performance.

Influence of Commodity Export and Production Improvements on Gender Employment

As noted earlier women comprise 86.8 percent of seasonal workers in the spice and condiment processing industries and nearly 73 percent of seasonal employees in olives and olive oil processing. Both industries are highly sensitive to production conditions, especially rainfall, and still depend today largely on traditional production and collection methods of product source material. Olives have alternative production cycles and high variability; capers, the major condiment, is harvested from wild caper bushes in rainfed areas. The employment data are provided for the 1991-92 agricultural year. Employment figures for 1992-93 are not expected to be as high, due to drought and irregular rainfall. The female work force works more directly with production than the male labor force so that the stability of female seasonal employment is more than males likely to be affected by improving production.

Peak Seasonal Labor Requirements

Directors were asked to identify their maximum labor requirements by gender of worker in their existing operations. The highest male labor requirements are found in wine processing units and the lowest in *primeurs* packing units. The average labor requirement in wine processing units is 114.7 males and in *primeur* packing units, 18.3. Among females, the largest average labor requirement is found in spice and condiment processors, 346.5 and lowest in wine processing, 3.7 as observed in Table 35.

The peak labor requirements in citrus packers was 81.4 males and 173.4 females. Among *primeur* packing units, it is 18.3 males and 43.7 females. Among sample flower packers, peaks average 38 males and 78 females. In fruit and vegetable cold storage units interviewed, 57.3 males and 116 females. Larger number of employees are needed in processing units. The peak labor requirement of fruit and vegetable processing units is 102.5 males and 265 females; spice and condiment processors, 82.5 males and 346.5 females. Less labor is needed at peak periods in olive and olive oil processing units. There 44.3 males and 176.2 females, on average, needed.

TABLE 35

1991-92 AVERAGE SEASONAL PEAK LABOR REQUIREMENTS BY GENDER AND BY POST-HANDLING HORTICULTURAL UNIT

Type of Unit	Male		Female		n
	Mean	s	Mean	s	
Packing:Citrus	81.4	42.5	173.4	90.5	10
Packing:Primeurs	18.3	13.9	43.7	21.2	14
Packing:Flowers	38.0	29.6	78.0	76.2	5
Cold Storage:Fruits & Veg,	57.3	54.4	116.0	103.5	3
Processing:Fruits & Veg.	102.5	110.1	265.0	152.7	6
Processing:Olives & Olive Oil	44.3	58.7	176.2	236.3	16
Processing:Spices & Condiments	82.5	109.6	346.5	415.1	2
Processing:Wine	114.7	42.2	3.7	3.5	3
AVERAGE	111.4		207.5		55

GENDER LABOR PATTERNS

This section describes the methods used by firms to recruit both permanent and seasonal laborers by gender. Included are indicators of degree of recruitment difficulty, extent of turnover by employment status and extent of absenteeism.

Modal Recruitment Methods

Directors were asked to identify in general the ways in which they recruit their permanent and seasonal workers. The following table describes the gender labor recruitment patterns for all sampled firms. Each method of recruitment is evaluated separately for each type of worker in all 59 firms. Directors can use more than one method to recruit each category of worker.

TABLE 36

PERCENT OF LABORERS BY GENDER AND STATUS OF WORKER RECRUITED BY METHODS USED TO RECRUIT LABORERS: ALL POST-HANDLING HORTICULTURAL UNITS (n=59)

Typical Method of Recruitment Used by Firm	Permanent		Seasonal	
	Male %	Female %	Male %	Female %
Same workers returning each year	22.0	18.6	50.8	45.8
Selected from waiting list	10.2	6.8	6.8	6.8
Selected from daily persons showing up	35.6	30.5	42.4	47.6
Selected by recommendation	32.2	16.9	11.9	10.2
Selected through labor contractor	0.0	0.0.	0.0	0.0
Recruited from special place or region	5.1	3.4	20.3	20.3

Each method was independently evaluated for each category of worker. More than one method can therefore be used for each category of worker. The table presents the percentage of firms positively responding to the use of each method for each worker category. For example, 22 percent of firms recruited permanent male workers from the labor pool of workers returning each year.

Labor recruitment patterns are found to differ by status of worker more than by gender [illegible] ker, except for the method of using recommendations for recruiting permanent workers. Of particular note is that none of the firms stated that used labor contractors to recruit either permanent or seasonal laborers. The most common method of recruitment of any laborer is to hire persons who just show up. This is most frequently used by firms for hiring female seasonal workers (47.6 percent responded positively), 42.4 percent of firms hired male seasonal workers this way. For recruitment of permanent laborers, 35.6 percent of firms used this method while 30.5 percent of firms stated they even used this method for recruiting female permanent workers.

For seasonal workers in particular, the most typical method used is to hire the same workers returning each year, whether male or female. About 50.8 percent of firms used it for recruiting male

seasonal workers and 45.8 percent of firms for recruiting female seasonal workers. Only 22 percent of firms recruited its male permanent workers in this way and 18.6 percent its female permanent workers.

One method of recruitment differs for recruiting male and female permanent workers more than others: using recommendations. Selection of male permanent worker as a hiring practice is used by 32.2 percent of firms. However, its use for hiring female permanent workers is reported by only 16.9 percent of firms. Selection through recommendations were used by about 11 percent of firms, only for hiring seasonal workers regardless of gender.

All recruitment methods usually used by firms suggest a surplus labor pool. Laborers, even those hired permanently, are selected often by just turning up. This may be an indicator of the low skilled nature of the work. It may also be indicative of management's lack of understanding of the impact on product quality and quantity resulting from minimal attention given to the selection of its laborers.

Degree of Difficulty in Recruitment of Laborers

Directors were asked if they had difficulties recruiting laborers any time of the year. Most firms stated they had no difficulties, not even at peak seasons. More constraint seems to exist for recruiting female than male laborers. Only five firms however stated they had difficulties with November the month of greatest difficulty in recruitment. Eighty-six percent have no difficulties recruiting male workers but 77.6 percent said they had none for female workers. Labor surplus is clearly evident throughout the year.

Turnover by Employment Status and Gender

High turnover of employees is usually associated with low productivity. With high turnover, managers are also less likely to be interested in investing in skills training even though skills training may affect individual employee performance. Directors were asked what percentage of their employees were replaced in each post during 1992.

Reported replacement rates are low for permanent staff and workers, and across job categories there are few differences by gender.

TABLE 37

PERCENT OF FIRMS STATING REPLACEMENT BY EMPLOYMENT POSITION AND GENDER IN POST-HANDLING HORTICULTURAL INDUSTRIAL UNITS (n=59): 1991-92

Employment Position	Male	Female
Director and technical personnel	13.6	0.0
Clerical and administrative staff	13.6	6.8
Permanent:skilled	13.6	5.1
unskilled	6.8	5.1
Seasonal:skilled	11.8	11.9
unskilled	57.6	62.1

As expected, the most frequently replaced post is that of the unskilled seasonal worker. About 58 percent of firms replaced their unskilled male seasonal workers and 62 percent of firms replaced their female seasonal workers from those hired last year. Only 12 percent of firms, however replaced skilled seasonal workers, whether male or female. The proportion of firms replacing their skilled male permanent workers is 13.6 percent. Firm turnover of skilled laborers is least among skilled female permanent workers. Only 5.1 percent of firms replaced their skilled female permanent workers in 1991-92. Skills training of workers would seem to positively affect this highly vulnerable class of worker in assuring continued employment, especially among female workers.

Only 14 percent of firms reported turnover of male directors and technical cadre, male personnel staff and male permanent skilled workers. For unskilled permanent workers, only 6.8 percent reported replacement. Fewer firms reported turnover of female staff in all permanent positions. No turnover occurred in any firm for female directors or technical cadre; 6.8 percent reported turnover of clerical and administrative staff, 5.1 percent of firms reported turnover of females in either skilled or unskilled permanent worker posts. In general, there is lower turnover of female employees than male employees in all but the unskilled seasonal worker posts.

Without some skills training program for workers, 83 percent of the labor force in post-horticultural processing and packing units would not be assisted for the development of this sector. With 71.2 percent of the labor pool seasonally employed and with women comprising 73 percent of seasonal unskilled workers and 46.4 percent of permanent unskilled workers, focused training on women workers would likely have the greatest impact on improving production. Since fewer firms replace skilled workers and the turnover by firms of women skilled permanent workers is lowest of any other employee post, skills training for female workers may also enhance their job security. Thus targeting skills training for seasonal female workers may assist firms improve their productivity as well as facilitate women seasonal workers gain job security.

Absenteeism by Employment Status and Gender

Directors were asked to estimate the percent of employees absent during the workday by gender and employment position during 1991-92. This question was difficult because records are not usually kept, especially on seasonal workers. Hence directors talked in general about the percent of absenteeism within their enterprise.

Directors provided estimates of absenteeism for males and females in each employment position. Estimated absenteeism is lower for females than males, except for seasonal workers, where there is no difference. Perception of absenteeism rates are apparently affected by both position and gender. Director's best estimates of absenteeism rates continually decrease the higher the occupational position. Women are indicated as having lower absentee rates than men in all posts except among seasonal workers when there is no reported difference. Data imply that employees have greater reliability the higher their status, particularly when they cross from being temporarily to permanently hired. It is also evident that directors perceive women as more reliable employees than their male counterparts. Keeping records of absenteeism by gender and post may be a good recommendation for firms as they look at factors such as worker reliability on improving worker performance and firm productivity.

CHAPTER FOUR

PRODUCTIVITY AND WORKER PERFORMANCE

INTRODUCTION

Improvement in worker productivity is one factor that can help firms increase their economic returns as well as help firms engaged in export trade bring in foreign exchange. To define productivity, however, is difficult. The method generally used in the United States is measurement by time per output achieved for specific posts. Engineers carry out time/work studies on a periodic basis to assess rates by machine, product, task, number of hours performed. Specific productivity measurement requires considerable time and scientific methods. Estimates are established by averaging over time from many workers to establish norms then comparing established norms to the actual daily output of a worker, which is usually averaged weekly to determine wages and bonuses. This type of measurement of productivity obviously could not be carried out in this study unless firms already had rates for each task and for each person engaged in such tasks. None of the firms had these. Moreover, it is not a one time indicator.

Within and across subsector commodity type firms there are so many different tasks and ways they may be measured that using a quantitative measurement of individual productivity would have been inappropriate in this study. Photographs of different tasks and working conditions illustrate this point.

EVALUATING EMPLOYEE PERFORMANCE

Productivity is qualitatively measured as worker performance. We asked directors if they evaluate productivity of their employees and what criteria they use for evaluation. We also asked them if they pay laborers for better performance.

When asked in general whether they use some evaluation criteria, 86 percent replied positively. Employees are reward for good performance, however, in only 73 percent of the firms. Of firms providing rewards, the use of bonuses was the most common reward. About 60 percent of firms used this method. Two other methods frequently used are salary increase (15.5 percent) and credit (5.2 percent). Only 9 percent of firms identified methods of compensation from these. No firm director reported using promotion as a way to reward employee performance.

Criteria for evaluating workers are different from criteria used to evaluate cadre and personnel staff. Table 38 indicates the relative use of criteria for measuring performance of seasonal and of permanent workers. Since multiple criteria can be used by firms, the percent of firms using a specific measure and the percent of firms not using a specific indicator are both instructive. Similarities in the relative use of criteria within categories of workers are apparent.

Most firms used product related evaluation criteria more frequently to assess seasonal workers than permanent workers. About 60 percent of firms use "number of finished products/time unit" to measure seasonal worker performance. Yet only 36 percent of firms use it to measure permanent worker performance. The second most common criteria is "quality of final or end products." It is used by 26.3 percent of firms to evaluate seasonal workers and by 19.6 percent of firms to evaluate permanent workers. The third most frequently used criteria differs according to whether the worker is seasonally

or permanently hired. For seasonal workers, "follows work assignment" is used by 14 percent of firms; only 10.7 percent of firms use it to evaluate permanent workers. "Constant application and attendance" is used more to evaluate permanent workers. Nearly 13 percent of firms used this for measuring permanent worker performance; only 7 percent of firms use it to evaluate seasonal workers.

TABLE 38

EVALUATION CRITERIA FOR
PERFORMANCE OF WORKERS, ALL POST-HANDLING
HORTICULTURAL UNITS (n=59): 1992-93

Evaluation Criteria	Seasonal (n=57)			Permanent (n=56)		
	Use	Not Use	Not Evaluate	Use	Not Use	Not Evaluate
Number of products/time unit	59.6	33.3	7.0	35.7	58.9	5.4
Quality of final product	26.3	63.2	10.5	19.6	71.4	8.9
Constant application & attendance	7.0	82.5	10.5	12.5	80.4	8.9
Follows work assignment	14.0	75.4	10.5	10.7	80.4	8.9
Other	1.8	87.7	10.5	3.6	89.3	7.1

For evaluation criteria for seasonal workers, 2 firms did not respond. Three firms did not provide evaluation criteria for permanent workers. Each evaluation criteria is asked separately for each type of worker since firm directors may use one or a multiple of methods in evaluating its workers.

Evaluating the performance of workers in personnel post, as technical cadre or as directors vary. Qualitative measures are more often used for evaluating administrative staff than technical cadre, as indicated in Table 39. The most used criterion for administrative staff is "no solicitation", which means "does not make requests nor asks questions." This passive criterion is used by 43.4 percent of firms. The second most common measure is meets the "satisfaction of the boss." It is used by 15.1 percent of firms. Only 9.4 percent of firms used good accounting skills or good personnel relations to evaluate administrative staff. Other criteria are stated by only 7.5 percent of firms.

Two evaluation criteria used by firms to measure technical cadre and directors are specific, measurable and performance based. However, more than 70 percent of firms do not use either. Out of 59 firms, only 19 percent used "amount of trade" and only 17.6 percent used "total sales". Less than 9 percent of the firms evaluated directors and technical cadre by whether they have "good personnel relations" while 12.5 percent of firms evaluated them by whether they meet their boss' satisfaction. Only 8.9 percent of firms used any other criteria.

TABLE 39

EVALUATION CRITERIA FOR PERFORMANCE
OF ADMINISTRATIVE STAFF AND TECHNICAL CADRES AND DIRECTORS,
ALL POST-HANDLING HORTICULTURAL UNITS (n=59): 1992-93

Evaluation Criteria by Employment Status	Use	Not Use	Not Evaluate	n
Administrative Staff: not solicitation	43.4	47.2	9.4	53
satisfaction of boss	15.1	73.6	11.3	53
good accounting skills	9.4	79.2	11.3	53
good personnel relations	9.4	79.2	11.3	53
other	7.5	83.0	9.4	53
Technical Cadre/Directors: amount of trade	19.6	73.2	7.1	56
total sales	17.9	73.2	8.9	56
satisfaction of boss	12.5	76.8	10.7	56
good personnel relations	8.9	80.4	10.7	56
other	8.9	80.4	10.7	56

The above analysis indicates that evaluative measures of worker performance are not well developed by firms, seldom used and, when used, differ by employment status. When performance based criteria are developed, they are seldom applied in evaluations by firms of their directors, technical cadre, administrative staff, and permanent workers. They are most used to evaluate seasonal workers. Only one firms actually had evaluation sheets with criteria to measure worker performance. Some 36.4 percent of firms requested technical assistance specifically in human relations management areas, or 21 firms. Developing performance based indicators for measuring worker performance would thus be a valuable contribution to this sector's development.

SUPERVISION AS A PRODUCTIVITY CONCERN

Directors are responsible for ensuring proper and economically effective productive conditions of the work place. One of the responsibilities of technical cadre is overall supervision of the production process. Supervision and management skills are missing criteria for either. Organizational conditions of the work place affect each's abilities to supervise as well as production. Worker: technical cadres, given earlier, indicate that supervision capacity is currently a problem in most subsectors. The financial ability of the firm to improve its supervision capability is partially dependent on how much social costs the firm can bear. It is also partially determined by firm management awareness that supervision capability affects worker performance.

It is apparent that human resource management and its relationship to industrial organization is underdeveloped among the post-harvest horticultural export firms sampled. From a sociological perspective, when firms give attention to developing effective human management within firms improvement in worker performance results and improved labor relations between workers and management occurs.

DEVELOPMENT OF WORK PERFORMANCE MONITORING INDICATORS

To illustrate various roles of men and women in post-harvest horticultural units and some organizational conditions of the work place, five pages of photographs are included in Annex B. These photographs are taken by the subcontractor during interviews or borrowed from ORMVA/Souls Massa. All photographs are taken in packing units. Detailed information on measuring productivity due to cadence of line, types of sorting activities carried on simultaneously by workers for different quality units, multiple persons working on the completion of one carton of end products, etc. is elaborated by the subcontractor in case studies. The pictures are presented in Annex B but described here to demonstrate why measuring individual worker productivity is difficult and its monitoring even more demanding.

Page one demonstrates women both in technical cadre and worker posts. Note the associated dress and background conditions for each. For technical cadre, a white coat, computer, separate work space. For the typical female worker, she maintains her traditional head covering and clothes and works in a common space with many workers in close proximity.

Page two presents female line workers in a modern firm with automated technology. The cadence of the chain and process of sorting products is less left to the individual worker and a standard set by the chain. Developing quantitative measurement of individual productivity is easier in this kind of environment.

Page three portrays semi-modern and more traditional packing line activities. The cadence of the chain may vary for different lines, frequency in which the machine which places the fruit on the line may also vary if machines are used or can depend on the ability of the *verseur* to dump the raw products on the line. In the second photograph note the number of packing boxes and crates so that different boxes of varying qualities of fruit can be packaged simultaneously. Sometimes women are packing 6 boxes at the same time. Cadence of chain, number of persons on the chain, number of boxes filled, various sizes of product packed, number of discards, height of chain or tables are only some of the factors which affect individual productivity of these seasonal workers.

Page four and five presents varying roles of male employees and their working conditions. Page 4 includes the firm director and his basic office environment, the floor (or could be line) supervisor/foreman, and the *verseur*. Note that the more basic the conditions of the later's work place, the more subject the whole process and subsequent productivity of workers are to the performance of this particular person and the conditions of height of the line, weight of the cartons, facility to turn cartons, angle it is turned, etc. affect the productivity and performance of other subsequent workers.

Page five denotes additional male posts. Note the variety and different impacts each would have on production. In the second photograph men are seen as supervisor/foreman, as *clerkiste* or lift operator and as end of the line controllers. In the first photographs we see them in the beginning transporting the cartons of raw products to the *verseur*'s site and in the last, preparing final export cartons on pallettes. Both work activities, like many other activities in which men are employed, involve using machinery or technical skills.

Finding a common denominator in which employee productivity can be measured and performances compared across positions is not an easy task. It would be constructive to compare work environments and gender roles as illustrated in these photographs will those during mid-term and final evaluations to visually observe status changes by women, line conditions of workers, and changes in working environments if more mechanical technologies are introduced. Indeed in subsequent monitoring closer attention is recommended to visually present factors affecting worker performance as a participatory monitoring tool to be used during interviews.

MOTIVATIONAL FACTORS AFFECTING WORKER PRODUCTIVITY

Directors were asked to identify the importance of 19 physical, situational, organizational, institutional, and social factors for improving worker productivity. They were then asked to rank the three most important factors. All firms responded except on the question, "good relationship with boss," where only 23 firms responded. Each question was asked separately as to how important the specific factor is perceived by the director to motivate workers to perform better.

Rather than presenting results in tables for each motivational factor, Table 40 summarizes the rank of importance attributed to each factor in two ways. On the left side, factors are ranked from most to least important according to the percent of firms identifying that specific factor as important. This is identified as the firm rank. On the right side, the firm directors own ranking of importance of the factor as either first, second, or third in motivating workers is presented. This is called the directors own rank.

According to the firm rank, the two most important motivational factors for improving worker productivity are individual bonuses and having good relations with the boss. About 91 percent of firm directors ranked individual bonuses and having good relations with the boss as important. The third motivational factor is better wages; and the fourth is having an opportunity for career advancement. Seventy-nine percent of firm directors ranked better wages as an important motivating factor for workers, and 71 percent stated the possibility of career advancement. Career advancement as a reward for good performance and increasing wages are seldom used to reward workers for good performance. Firms, however, do use bonuses to reward good performance.

Of the situational aspects appraised as motivating factors, lighting and air ventilation were most important, ranking fifth. Seventy percent of firm directors considered this a factor in enhancing worker productivity. Only 32.1 percent of directors regarded separation of tasks by gender of employee as an important factor influencing worker motivation. This was ranked 15th. Few firms also felt rewarding work groups as an important motivation tool (ranked 17th), further indicating the economic dominance of the orientation of management toward labor.

Notable is the importance firm directors place on including social services within the firm. About 67 percent of directors consider pensions important and 64.4 percent consider health, accident and disability insurance important for workers. Indeed, 91.4 percent of firms ranked the latter as having at least some importance towards improving worker productivity. Maternity leaves were 13th in importance and offering family planning services the lowest. Only 11 percent of firms considered offering family planning services an important motivational factor although 53 percent did indicate that it had at least some importance. These findings suggests that a private sector family planning promotion program may receive welcome response by at least some firm directors; however, a health insurance and pension plan promotional program is more likely to receive a more favorable response.

Only 49 percent of firms considered offering a credit and savings option as a factor influencing worker productivity. The latter is now usually offered on an informal basis, often by credit in company stores. Further efforts to look at the existing credit and savings program may offer suggestions on what types of plans are more effective in improving worker performance.

When directors were asked to list the three most important factors, ranked first is "better wages". About 65 percent of the directors ranking it as the number one most important factor. The factor ranked second is "individual bonuses". Thirty-five percent of directors ranked it as second. Sixteen percent of directors ranked "individual bonuses" also as third. Interesting from a human resource perspective is that 19.3 percent of directors ranked insurance (health, accident, disability) as second; similarly, 19.3 percent of directors ranked providing transport to and from work as second in importance.

TABLE 40

DIRECTORS' PERCEPTIONS AND RANKING OF MOTIVATIONAL FACTORS AFFECTING PRODUCTIVITY OF EMPLOYEES IN ALL POST-HANDLING HORTICULTURAL UNITS (n=59): 1992-93

Motivation Factor	Degree of Importance				Priority Rank (n=57)		
	Important	Some	None	n	First	Second	Third
Individual bonuses	91.4	6.9	1.7	58	22.8	35.1	15.8
Good relations with boss	91.3	4.3	4.3	23	3.8	0.0	0.0
Better wages	79.3	20.7	0.03	58	64.5	3.5	1.8
Possibility of career advancement	70.7	22.4	6.9	58	0.0	1.8	3.5
Better lighting and air ventilation	70.2	21.1	8.8	57	0.0	0.0	5.3
Pension	67.2	24.1	8.6	58	0.0	7.0	10.5
Friendly relations among workers	66.7	22.8	10.5	57	3.5	5.3	8.8
Insurance (health, accident, disability)	64.4	27.1	8.5	59	1.8	19.3	8.8
Emergency medical services	57.9	31.6	10.5	57	0.0	0.0	0.0
Credit and savings options offered by firm	49.1	35.1	15.8	57	0.0	0.0	7.0
Adjustments of hours and breaks	48.2	39.3	12.5	56	0.0	0.0	5.3
Provision of transport to and from work	43.9	40.4	15.8	57	1.8	19.3	8.8
Maternity leave option	40.7	38.9	20.4	54	0.0	7.0	10.5
Restaurant or foyer for eating at the firm	34.5	37.9	27.6	58	0.0	0.0	0.0
Separation of tasks by gender of worker	32.1	35.7	32.1	56	0.0	0.0	0.0
Health insurance for children	28.6	42.9	28.6	56	0.0	0.0	0.0
Bonuses to work groups	15.8	40.4	43.9	57	1.8	5.3	1.8
Day care services for worker children	11.1	33.3	55.6	54	0.0	0.0	0.0
Family planning services available	10.9	41.8	47.3	55	1.8	0.0	0.0

Factors are those important for improving productivity. Each factor is separately analyzed with the number of firms directors responding to each factor recorded in column 5. On the right, the directors own ranking of the factor as first, second and third is presented. Two firm directors did not Provide specific ranks.

In summary, the rank of motivational factors suggests firms have an individualistic orientation towards workers rather than seeming to understand workers as affected by conditions of the work place and its physical environment. Individual rewards or benefits are considered most important for improving productivity whether they are tangible in terms of money or intangible in terms of keeping good relations with the management (no doubt for job security).

CHAPTER FIVE

CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The purpose of this study is to present a general picture or baseline of the subsector for post-harvest horticultural units by describing employment profiles in general for this sector and analyzing factors affecting male and female employment and their productivity and work performance. Under MAPP, specific subsector commodity studies are carried out in the filière approach. While this is a free standing study, its intent is also to present baseline sociological and gender data for MAPP to select indicators to include in their monitoring and evaluation system. Institutional and employee data and study results are also intended to assist external evaluators when they assess the affects of agri-business development promotion in this subsector on male and female employment and on worker productivity.

Enterprise level analysis is presented in three sections. The first section describes the sample of firms by presenting institutional information about the firms and the way they are organized. Section two focuses on employment issues, including employment profiles for all firms, by type of transformation (processing, packing and cold storage) and by principal economic activity. Seasonality is analyzed specifically by gender, because of its considerable importance in providing employment opportunities. Section three investigates enterprise directors' perceptions of factors important to improving the productivity of employees. Information includes potential indicators for monitoring employment creation, welfare and private sector competitiveness in the post-harvest horticultural export sector from a gender and sociological perspective. Enterprises are selected to be representative of the broad post-harvest horticultural export sector transformation units for the 1992-93 agricultural year.

Institutional and Organizational Factors

The first section provides a general institutional and structural picture of sample firms. Included is a description of the legal status, organizational investment structure, total sales, production costs, labor costs, relative costs of labor to production, export trade status and projections, degree of provisional difficulty, orientation towards mechanization, and extent to which human resource services in health, training and maternal/child health preventive services exist and for whom they are available. The extent to which labor has represention also is discussed.

Firms under study are private sector firms, 88 percent of which are wholly Moroccan invested, and 44 percent of which are organized as corporations. Eight firms are subsidiaries of another Moroccan company and two are affiliated with a foreign company. Seven firms have foreign investment, with the median amount of investment 33 percent, indicating considerable influence of foreign investors in these firms. Incipient vertical integration is occurring by national and mixed national-foreign enterprises. Only 20 percent of firms now have female members on their Board of Directors, a factor likely to be a deterrent to addressing human resource issues and the impacts of new technologies on women.

Most firms carry out diverse activities. Only 30 percent of fruit canning end products is produced in fruit and vegetable processing units; 35 percent is produced in olive and olive oil processing, and 35 percent from cold storage unit alternative operations. Exceptions are found only in wine processing units and among flower packing units. Technologies there are required to be more product specific.

Because several firms engage in multiple activities, some export more than one commodity. The subcommodity type units expecting to increase their exports the most in 1993-94 are *primeur* packing units. About 31 percent expected to increase their exports next year. Of olive processors, 19 percent expected to increase their exports. Only 12 percent of citrus packers expected export increase. This indicates positive signs of market expansion. While 100 percent of spices and 95 percent of total production in firms interviewed was exported in 1991-92, export projections of spices is expected to increase by 1.7 percent in 1993-94, mostly in firms engaged in spice exports as a secondary activity.

Total production costs and total sales vary considerably by type of sub-commodity firm and type of transformation. Further analysis is required to include production capacity, percent of utilization of production capacity as well as size of firm using multi-variate analysis to examine the effects of these institutional factors on employment.

Labor Costs

Low labor costs are evident. Median labor costs are 14 percent of total production costs with a range of 2 to 73 percent for all firms. Seventy-five percent of firms report total wages and benefits paid is only 24 percent or less of total production costs. Five firms only indicate that 40 percent or more of production costs went towards wages and social benefits in 1991-92. Lowest average labor costs are in *primeur* packing units in which 69 percent of employees are female and 76 percent of its employees employed as seasonal unskilled workers. Highest average labor costs are found in wine processing units, where only 8.5 percent of employees are female but only 24 percent of its labor force is seasonally employed. Sixty percent of firms plan to mechanize but only 11 percent of these firms give product quality as the major reason for mechanization. Reducing labor, improving productivity or both are main reasons for mechanization. Cost was listed as a deterre... to automation by only 6 percent of the firms. Only 16 percent of firms stated they did not need mechanization.

Raw Product Provision Issues

The enterprise analysis also examines degree of difficulty in obtaining primary products, usual location for obtaining raw products, and extent of guarantee firms have for obtaining raw products. Seventy-one percent of the firms stated they have had some difficulty, and about of third of these have great difficulty in obtaining raw products for business operations.

Only 51 percent of firms obtain 100 percent of their raw products from the same region of firm location. However, 72 percent obtain some of their raw products within the same region.

Most post-handling horticultural units have at least 50 percent guarantee of raw products. The exceptions are cold storage units of fruits and vegetables and spice and condiment processors. Citrus packers have the most guaranteed sources. For them, 90 percent of their base products are sescured by their own production or that of cooperative members. The next most secured raw products are for flower packing unit operations. Three out of five firms have 100 percent guarantee of base flowers because they are vertically integrated firms. A more refined index of raw product guarantee is suggested as one gender employment indicator because guarantee of base products potentially could affect percent of permanent laborers — of whom now only 46 percent are women and the duration of seasonal work — of whom 73 percent of seasonal workers are now female. How much would guarantee of base products improve employment opportunities for women to be hired as permanent workers in transformation units is an important issue to assess due to the filière approach used by MAPP.

Human Resource Service Provision

Of major concern is the extent to which the welfare of employees is taken into account in post-harvest horticultural units. About 73 percent of firms state they provide maternity and paternity leaves for their employees with 86 percent providing paid leave. Only 3 firms provide day care services for children of personnel staff and cadre; one provides a creche for permanent workers; and only two provide creches for seasonal worker children.

Directors recognize the importance of training employees for improving their performance. Nearly 77 percent provide training of their new recruits. Only 21 percent now provide skills upgrading or continuous training. Yet, 84 percent of directors favor a system of continuous employee training.

With respect to labor representation, fourteen firms have labor unions and 7 have personnel delegates. When labor unions do exist, they tend to be active and topics cover not only wages, but also working conditions and social conditions.

Employment Profiles

Section two depicts the employment structure in post-handling horticultural units in general and by type of principal sub-commodity transformation activity. There are 90 directors, of whom 5.6 percent are female; 138 administrative cadre and 140 technical cadre, of whom 9.4 percent and 7.1 percent, respectively, are positions held by females. The total number of persons employed in personnel staff posts is 314, of whom 42.4 percent are female. Skilled labor force positions are both permanent and seasonal. Slightly more than two times the number of skilled employees working in permanent positions than seasonal ones, 986 vs. 436. The percent of females holding skilled seasonal positions is 28.9 percent; only 3.7 percent of females hold permanent skilled worker positions. The largest number of employees work in unskilled positions. A total of 9112 persons are seasonally employed and 1581 permanently employed. Women comprise 74 percent of the seasonal unskilled labor force and only 46.4 percent of the permanent unskilled labor force in the 59 firms interviewed.

For monitoring purposes, tracking the percent of change in females hired as technical and administrative cadre as well as the percent change of females hired as permanent skilled workers would be useful for indicating impact of development assistance to this sector on employment generation for women.

Employment Profiles in Processing Units

Men dominate staff positions and women dominate unskilled seasonal workers except in wine processing units. In these units, there is a low proportion of employees hired as seasonal workers, few of whom are women. While there is also a larger proportion of personnel staff in wine processing than in most other units, the percentage of women holding personnel staff positions is the low.

Women are employed more evenly in staff and worker positions in flower packing units. Even there, the percentage of women in each post is seldom more than 25 percent of the persons holding the management post. Among *primeur* packing units, women employees are hired in personnel staff or in unskilled seasonal worker positions only.

Among personnel staff, The highest proportion is found in the spice sector, 87.5 percent but only 1 percent of spice sector employees are in personnel staff posts. The highest proportion of female technical cadre is only 15.6 percent, in olive and olive oil processing units. Among administrative cadre,

the highest proportion is 25 percent, in the spice processing units. The only subsector with a female director or manager is in olive and olive oil processing units.

Employment Profiles in Packing and Fruit and Vegetable Cold Storage Units

Among the 32 packing units, two females are directors. One in a flower packing unit, another in a fruit and vegetable cold storage unit. The percent of females employed as administrative cadre also ranges from 27 percent in flower packing units to 17.4 percent in *primeur* packing units. The percent of female technical cadre is 27.3 percent in flower packing units and 3.8 percent in citrus packing units. None is hired in the *primeur* packing or cold storage units sampled. The percent of skilled permanent worker posts is only 1 percent in citrus packing units. There are no females in this post in *primeur*, flower and cold storage units. All hire a large number of female unskilled seasonal workers. The highest proportion is in flower packing units, 83 percent, next in *primeur* packing units, 76 percent. The percent of females in this post in citrus packing units is 67.6 percent and in cold storage units, 66.9 percent.

Employment profiles by subcommodity subsector will require greater refinement to tease out factors affecting subcommodity variability. In subsequent studies it would be important to measure change in the percent of females in unskilled seasonal work positions and whether a reduction in females in these positions is associated with a firm's increase in females holding permanent skilled worker positions.

Seasonality and Other Factors Affecting Employment

Seasonality is a sensitive indicator of employment creation for both men and women. Commodities have different demands for seasonal labor. In the packing sector, male seasonal workers tend to remain fairly steady in their seasonal employment, while women's employment is highly dependent on seasonal demand. Yet, on average only 38 percent of all seasonal workers is "regularly" employed. Greatest months of inactivity are August and September, a period when families are looking for money to pay school fees.

Multiple methods are used to recruit workers but firms hire female workers less often through recommendations than male workers. About 32 percent of firms hire male permanent workers this way compared to 17 percent of firms hiring female permanent workers. Slightly more than 50 percent of firms hire their seasonal male workers from returning workers and 36 percent of firms hire their male permanent workers from persons just showing up at the gate. The latter method is the most frequently used by firms for hiring both permanent and seasonal female workers. No firm reported using labor contractors. As firms become more mechanized and requirements for skilled labor increase, would shifts in methods used by firms to recruit its labor force take place? This is one potential indicator of impact of development assistance in this sector on employment of women.

Productivity and Worker Performance

Eighty-six percent of firms said they evaluate their employees. Only 73 percent of them state they reward good performance. Those that do reward use mainly the bonus method (60.3 percent). Other methods are salary increase (15.5 percent of firms) and credit (5.2 percent of firms). no firm reports using promotion as a way to reward worker performance.

For evaluating worker performance, 60 percent of firms used number of end products/time unit, a quantitative measure, to evaluate seasonal workers. The same measure is used, however, by only 36 percent of firms for evaluating permanent workers. The criterion most often used for evaluating

administrative/personnel staff is "no solicitation", meaning not asking questions or making requests. About 43 percent of the firms use this passive measure. It is not clear what criteria are used for evaluating technical cadre and directors. While about 90 percent of firms stated they perform evaluations, when four criteria were identified, the highest use was 20 percent and only 9 percent of firms stated there are other criteria. The most used criteria is amount of trade, folowed by total sales, 18 percent, satisfaction of the boss, 12.5 percent and good personnel relations, 9 percent. It would appear that since each question was asked separately, while most firms state they evaluate even their technical cadre and directors, most actually do not.

Directors' perceptions of what motivates workers to improve performance includes a broad spectrum of 19 individual, social, physical and institutional factors. Most directors have an individualistic orientation towards workers rather than seeing workers as affected by conditions of the workplace and its physical environment. The three factors most often stated factor as important by directors are individual bonuses, good relations with the boss and better wages. More than 91 percent of directors stated individual bonuses and "keeping good relations with the boss" are important and 79 percent of directors stated better wages as important. The lowest ranking factor by directors was making family planning services available. Yet, 11 percent of firms stated that their availability is important. When directors were specifically asked to rank the three most important factors affecting worker performance, "better wages" is most often ranked by directors as the number one factor. Providing "individual bonuses" is most often ranked by directors as both second and third in importance. Sixty-five percent of directors ranked better wages as most important.

RECOMMENDATIONS

Based on study findings, several recommendations are advanced for further development work in the agribusiness export promotion assistance program. These recommendations are expected to assist USAID in its program effects to further enhance the welfare and employment creation opportunities of male and female workers in general but in particular women employees. Recommendations are also made to assist MAPP utilize the data further to develop baseline firm data for monitoring and evaluation purposes.

1. USAID/Morocco prepare a WID Action Plan for enhancing employment opportunities and improving welfare opportunities for women employed in the post-harvest horticultural export sector.

2. USAID support further research efforts to utilize the data for the development of enterprise case files so that baseline data can be specific for each firm as well as general for the sector.

   a. Case files are suggested to be prepared so that a summary by firm includes each institutional, employment and productivity factor of this study along with such factors found in this study likely to affect employment and productivity in various subcommodity sectors but not presented here, such as firm production capacity and production capacity utilization.

   b. Case files are suggested also to include a summary of the employee data for variables analyzed in this part of the study so that a baseline reference on the enterprise and employee level is available at both the enterprise level and sector level.

3. USAID support continued exploitation of data sets using multi-variate analysis to determine what are critical determinants affecting women's employment and worker performance in this sector.

4. USAID provide development assistance in labor management to assist firms develop their own performance based evaluation of the performance of employees at all levels as well as management training in how to apply cost-effective ways to regularly utilize the format. This is recommended as a step towards improving worker productivity at all levels as well as a more objective way to enable career advancement opportunities for women than now presently exists.

5. USAID promote assistance to specialized training organizations to enable them to offer at reasonable or subsidized costs, tailored skills training programs to enterprises for continuous skills upgrading of employees at all levels or to meet specific technical needs of the firm. Encouraging skills training for all laborers, not just permanent employees, and technical training refresher courses for cadre, with incentives to assure that female cadre also are trained are recommended. This development initiative in particular is expected to increase the security of employment for seasonal female workers and improve career advancement opportunities for female cadre employees.

6. USAID support labor-management seminars in which motivational factors for improving employee productivity stated by directors and by employees in each firm are compared and discussed. Ways in which they can be cost effectively applied in order to improve labor's contribution to productivity as well as improve the welfare of workers is recommended as an important WID program area to be developed and monitored.

7. USAID review or strengthen its program of financial assistance or incentives to firms that support human resource strategies related to family planning services, day care services, health insurance for children, maternity leave and private insurance policies for health, accident and disability insurance for which workers and directors agree as important for improving productivity.

8. MAPP or other projects providing development assistance to these post-harvest horticultural units provide technical and financial support to firms to introduce simple monitoring systems to measure effectiveness in human resource activities as well as economic and commercial indicators.

9. Future monitoring and evaluation work use participatory methods as well as survey methods to assess ranking of motivational factors and labor conditions which workers identify and prioritize themselves. This will enable new factors to be introduced over time from both workers and management.

Without specific development initiatives which address labor concerns, security of employment for workers and promotion of female employees will likely be dealt with as secondary concerns. Moreover, women's wide-reaching contribution to the development of this important sector in the economy will continue to go unrecognized and opportunities to generate employment and improve their welfare will not be targeted without a plan of action.

APPENDIX A

FIRM CLASSIFICATION AND MAJOR PRODUCTS HANDLED IN POST-HARVEST ACTIVITIES

ORIENTEE VERS L'EXPORTATION

LISTE DES SOCIETES ENQUETEES

REGION	NOM DE LA SOCIETE	CODE ID	PRODUITS TRAITES	CLASSEMENT
AGADIR	COOP. AGRUMAR SOUSS	0803	AGRUMES	CONDITIONNEMENT AGRUMES
AGADIR	COOP. COPAG	0805	AGRUMES,POMME DE TERRE	CONDITIONNEMENT AGRUMES
AGADIR	COOP. M'BROUKA	0806	AGRUMES,TOMATES,POMME DE TERRE PIMENT,AUTRES(AUBERGINES)	CONDITIONNEMENT AGRUMES
AGADIR	PACK SOUSS	0808	AGRUMES,TOMATES,MELON,FRAISE POMME DE TERRE	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. TOUZAIKOU	0809	TOMATE	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. TAKAD	0810	TOMATE,POIVRON,COURGETTE ET PIMENT FORT.	CONDITIONNEMENT PRIMEURS
AGADIR	JOUBIR	0812	TOMATE,POMME DE TERRE,PIMENT FORT ET COURGETTE	CONDITIONNEMENT PRIMEURS
AGADIR	BOUCHOUKOU	0813	TOMATE,PIMENT FORT,POIVRON POMME DE TERRE,COURGETTE	CONDITIONNEMENT PRIMEURS
AGADIR	WAFA	0814	TOMATE,PIMENT FORT,POIVRON POMME DE TERRE,COURGETTE AUBERGINE	CONDITIONNEMENT PRIMEURS
AGADIR	NECTAR PRIM	0815	TOMATE	CONDITIONNEMENT PRIMEURS
AGADIR	BANANE	0816	TOMATE,COURGETTES,POIVRON, POMME DE TERRE	CONDITIONNEMENT PRIMEURS
AGADIR	ARBOR SUD	0817	FLEURS(ROSE,OEILLET,GLAIEUL) MELON,JUJUBE.	CONDITIONNEMENT FLEURS
AGADIR	AGRITRADE	0818	ROSE(FLEURS)	CONDITIONNEMENT FLEURS
AGADIR	COOP. AIROU	0804	TOMATES,COURGETTES,PIMENT FORT	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. AL BARAKA	0807	AGRUMES	CONDITIONNEMENT AGRUMES
AGADIR	AMY	0811	TOMATE,POMME DE TERRE,POIVRON PIMENT FORT,MELON	CONDITIONNEMENT PRIMEURS
AGADIR	COOP.TOUBKAL	0819	TOMATE,POIVRON,PIMENT FORT, MELON,POMME DE TERRE,COURGETTE	CONDITIONNEMENT PRIMEURS
MEKNES	CONSERVES NORA	5501	PETITS POIS ,HARICOT VERT, ORANGE,PRUNEAUX,ASPERGE.	CONS. LEGUMES.
MEKNES	HUILERIES DE MEKNES	5507	OLIVES	HUILERIE
MEKNES	LES CELLIERS DE MEKNES	5503	RAISIN	VIN
MEKNES	S.O.D.E.A.	5504	PRUNES,POMMES,POIRES,RAISIN ORANGES,KIWI,FRAISIERS.....	ENTREPOT FRIGO

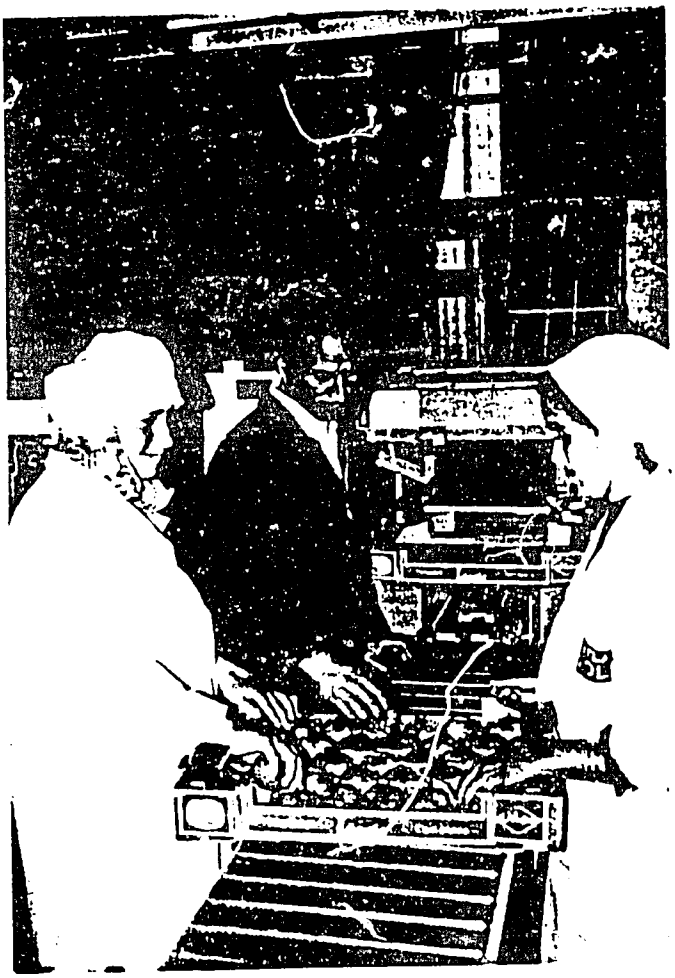
REGION	NOM DE LA SOCIETE	ID	PRODUITS TRAITES	ACTIVITE
MEKNES	SOCIETE COOP.VINICOLE D'AIT SOUALA	5505	RAISINS	CONSERVE VINS
CASABLANCA	PRODUITS SESIA	0201	OLIVES,CORNICHONS.	CONDIMENT
CASABLANCA	ETABLISSEMENT FRAI	0202	OLIVES	CONSERVE OLIVES
CASABLANCA	COOPERATIVE YAMAMA	0204	TOMATE,POMME DE TERRE	CONDITIONNEMENT PRIMEURS
CASABLANCA	SINCOMAR PARLIER ET FERRAND	0205	RAISINS(VIN)	CONSERVE VINS
CASABLANCA	FRIGO TARIK	0206	POMMES,POIRES.	ENTREPOT FRIGO
CASABLANCA	FRIGO DELASSUS	0207	AGRUMES,POMME DE TERRE	ENTREPOTS,FRIGO
CASABLANCA	MAROC AGRUMES(PROMAGRUM)	0209	AGRUMES	CONDITIONNEMENT AGRUMES
CASABLANCA	UNION MAGHREBINE DE CONDITIONNEMENT (U.M.C)	0210	AGRUMES	CONDITIONNEMENT AGRUMES
CASABLANCA	BEROI	0212	TOMATES,POMMES DE TERRE. COURGETTES,CAROTTES	CONDITIONNEMENT PRIMEURS
CASABLANCA	CLEMENTINE	0214	FLEURS,(ROSE)(OEILLETS),AGRUMC	CONDITIONNEMENT FLEURS
CASABLANCA	VINAIGRERIE CHERIFIENNE REUNIE (V.C.R)	0203	CORNICHON,HARICOT VERT. MAYONNAISE,VINAIGRE	EPICE/CONDIMENT
CASABLANCA	CONSERVERIE VEGETALE MAROCAINE (COVEM)	0208	TOMATE,HARICOT VERT,ABRICOT COND.AGRUMES	CONSERVE LEGUMES
CASABLANCA	SANA	0211	TOMATE,POMME DE TERRE,PIMENT, AUBERGINES,FIGUES DE BARBARIE	CONDITIONNEMENT PRIMEURS
FES	SOFIAG	5601	OLIVES,CAPRES(AVANT LEGUMES)	CONSERVE OLIVES
FES	BEN MAKHLOUF ABBAS	5602	OLIVES	HUILERIE
FES	SIOF	5603	OLIVES,CAPRES,GRAINES OLEAGINEUSES	HUILERIE
FES	SOMIO	5604	OLIVES(HUILE DE GRIGNON)	HUILERIE
FES	SICOPA	5605	OLIVES,CAPRES,PIMENT,CORNICHON OIGNON SAUVAGE,ABRICOT	CONSERVE D'OLIVES
FES	MAROC CAPRES	5606	OLIVES,CAPRES	CONSERVE D'OLIVES
MARRAKECH	IOP AGRO	0401	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	RIM (ROYAL INDUSTRIE MAROCAINE)	0402	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	ZERHOUNI CONSERVERIE DE MARRAKECH	0404	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	CIS EL MANSOURI	0405	OLIVES,ABRICOTS,LUPIN,CEREALES LEGUMINEUSES	CONSERVES FRUITS
MARRAKECH	HUILERIE ZEMRANI HNERITIERS	0406	OLIVES	HUILERIE
MARRAKECH	PAL MAROC S.A	0406	OLIVES,ORANGE,ABRICOTS	CONSERVE FRUITS

SUITE

REGION	NOM DE LA SOCIETE	CODE ID	PRODUITS TRAITES	CLASSEMENT
MARRAKECH	SOMIA	0407	OLIVES,CORNICHON,CAPRES	CONSERVE D'OLIVES
MARRAKECH	SOCIETE OLEICOLE IGRISSI	0408	OLIVES	HUILERIE
MARRAKECH	CIS TALDI	0409	OLIVES,CARROUBE	HUILERIE
MARRAKECH	IOP FOOD MOROCCO	0410	OLIVES,ABRICOTS,CORNICHON	CONSERVE FRUITS
MARRAKECH	SOCOCEMA.COOP.AGRICOLE D'ORANGE DE MARRAKECH	0411	AGRUMES,MELON,MARICOTVERT	COND.AGRUMES
MARRAKECH	PLANT ATLAS	0412	ROSE	COND.FLEURS
MARRAKECH	NOVA FLOR	0413	ROSE	COND.FLEURS
BERKANE	PUROASA MAROC	0601	HIORA	CONSERVES EPICES
BERKANE	COOP. AGRICOLE NASR BOUGHNIBA	0602	AGRUMES	CONDITIONNEMENT AGRUMES
BERKANE	STATION MADAGH DU COND.	0603	AGRUMES	CONDITIONNEMENT AGRUMES
BERKANE	SOCOBER	0604	AGRUMES	CONDITIONNEMENT AGRUMES
LOUKKOS	COMPAGNIE INDUSTRIELLE DE LOKUS	0701	TOMATES, HIORA	CONSERVES DE LEGUMES

ANNEX B

PHOTOGRAPHS OF GENDER ROLES AND WORKER PERFORMANCE



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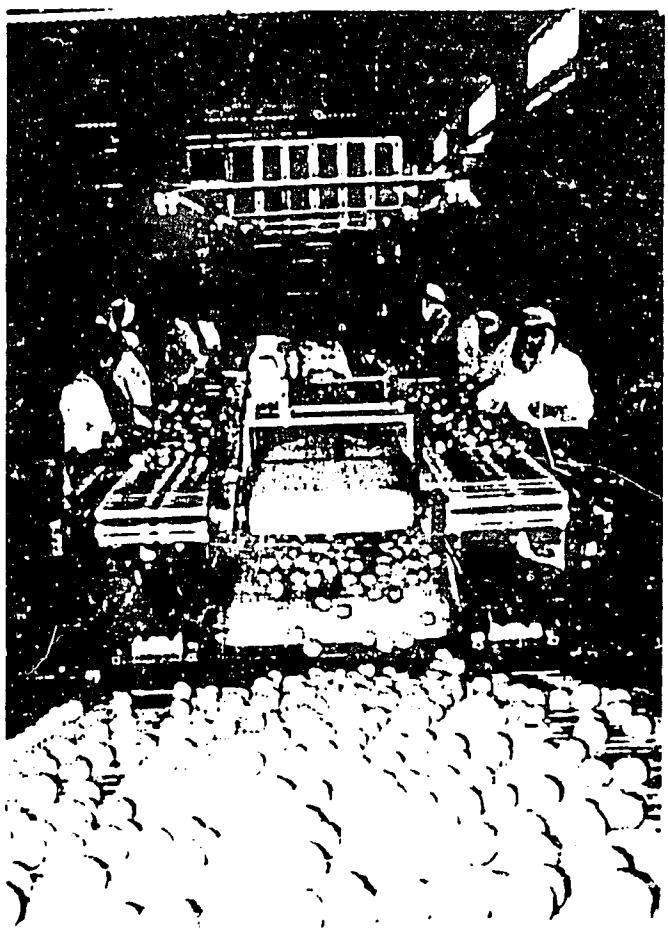
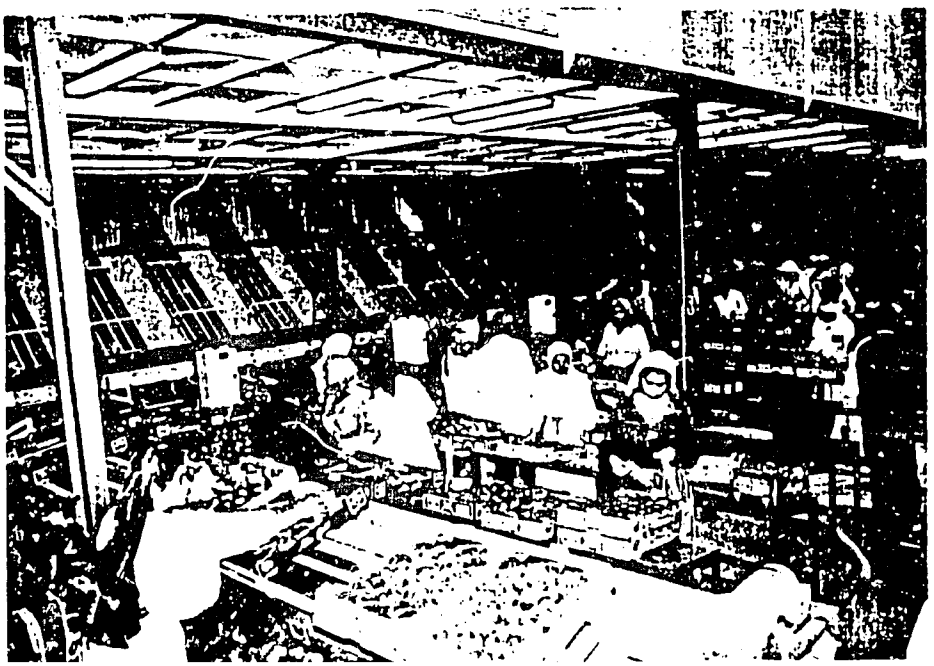
HERALD





Moroccan Agribusiness Employment Survey Project
Final Report

GENDER AND EMPLOYMENT IN MOROCCAN AGRIBUSINESS

VOLUME III

ANALYSIS OF THE EMPLOYEE SURVEY

By:
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GENESYS

TABLE OF CONTENTS

	Page
EXECUTIVE SUMMARY	ix
CHAPTER ONE	
INTRODUCTION	1
SECTORAL FOCUS	1
EMPLOYEE FOCUS	1
CHAPTER TWO	
SOCIO-DEMOGRAPHIC PROFILE OF EMPLOYEES	3
EMPLOYEE TYPES AND DISTRIBUTION BY INDUSTRY	3
Positions by Sex in All Subsectors	3
Permanent and Seasonal Positions by Sex in All Subsectors	5
Major Positions by Sex in Packing and Processing Firms	6
Male and Female Permanent and Seasonal Employees by Industry Type	8
Permanent and Seasonal Employees by Age in Packing and Processing Firms	8
MOBILITY AND MIGRATION PATTERNS OF EMPLOYEES	10
Short-term Migration of Male and Female Permanent and Seasonal Employees	10
Long-Term Migration of Male and Female Permanent and Seasonal Employees	10
Residential Mobility of Male and Female Permanent and Seasonal Employees	11
FAMILY STATUS OF EMPLOYEES	12
Marital Status of Male and Female Permanent and Seasonal Employees	12
Marital Status by Age Group for Permanent and Seasonal Employees	13
Number of Children of Male and Female Permanent and Seasonal Employees	14
EDUCATION LEVELS OF EMPLOYEES	15
Level of Education by Position and by Sex	15
Level of Education of Male and Female Permanent and Seasonal Employees	18
IMPORTANCE OF WORKER INCOME AND ATTITUDES TOWARD THE WORK	19
Share of Worker's Salary in Total Family Revenue	19
Sufficiency of Worker Income for Family Food Needs	19
Worker Attitude Toward Their Sons and Daughters Continuing in the Same Work	20
Acceptability of Worker's Job to Relatives and Neighbors	22
Job Acceptability to Male and Female Seasonal Workers	22

CHAPTER THREE

EMPLOYMENT PATTERNS 25

SENIORITY OF PERMANENT AND SEASONAL EMPLOYEES BY POSITION IN HORTICULTURAL PACKING AND PROCESSING FIRMS 25
- Seniority of Male and Female Permanent and Seasonal Workers in the Horticultural Sector 26
- Total Agribusiness Employment Experience of Male and Female Permanent and Seasonal Workers in Packing and Processing Firms 26
- Other Employment Held by Type by Male and Female Seasonal Workers in the Previous 12 Months 27
- Method of Recruitment of Male and Female Permanent and Seasonal Employees 28
- Method of Recruitment for Male and Female Permanent and Seasonal Workers 30
- Average Number of Hours Worked Daily by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms 31
- Average Number of Days Worked Per Month by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms 33
- Average Number of Months Worked Per Year by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms 35

CHAPTER FOUR

REMUNERATION 37

TYPE OF REMUNERATION BY POSITION IN HORTICULTURAL FIRMS 37

TYPE OF REMUNERATION FOR PERMANENT AND SEASONAL EMPLOYEES IN HORTICULTURAL FIRMS 37
- Average Monthly Salaries by Position and by Type for Employees in Horticultural Firms 38
- Current Salary by Type for Permanent and Seasonal Workers 39
- Average Current Salary by Type for Male and Female Employees 40
- Average Annual Salary Income of Permanent and Seasonal Employees from All Sources by Position 41
- Average Annual Salary Income from All Sources for Male and Female Permanent and Seasonal Employees 43

AVERAGE ANNUAL SALARY FROM ALL SOURCES FOR PERMANENT AND SEASONAL WORKERS GLOBALLY AND IN PACKING AND PROCESSING FIRMS 44
- Global View of Worker Annual Salaries 44
- Annual Salary by Industry 45

CHAPTER FIVE

EMPLOYEE SERVICES AND HEALTH BENEFITS 47

SALARY ADVANCE AND UNION MEMBERSHIP 47
- Access to Employer Credit by Male and Female Permanent and Seasonal Workers 47
- Average Maximal Credit Advance per Year for Male and Female Permanent and Seasonal Workers 48
- Union Membership of Male and Female Permanent and Seasonal Workers 48

EMPLOYER-PROVIDED INSURANCE AND HEALTH BENEFITS 49
- Availability of Employer-Provided Health Insurance to Male and Female Permanent and Seasonal Workers 49
- Availability of Employer-Provided Life or Permanent Disability Insurance to Male and Female Permanent and Seasonal Workers 50
- Availability of Employer-Provided Retirement or Pension Plan to Male and Female Permanent and Seasonal Workers 51
- Availability of Employer-Provided Accidental Injury Insurance to Male and Female Permanent and Seasonal Workers 52
- Availability of Employer-Provided Emergency Assistance to Male and Female Permanent and Seasonal Workers 53
- Availability of Employer-Provided Family Planning Services to Male and Female Permanent and Seasonal Workers 54
- Willingness of Workers to Use Family Planning or Prenatal Services If Available at Work Site 55
- Availability of Employer-Provided Child Vaccination Services to Male and Female Permanent and Seasonal Workers 55
- Availability of Employer-Provided Vaccination Services to Male and Female Permanent and Seasonal Workers 56
- Employer-Provided Medical Examination at Hiring 57
- Availability of Employer-Provided First Aid Services to Male and Female Permanent and Seasonal Workers 57
- Availability of Medical Doctor at Work Place for Male and Female Permanent and Seasonal Workers 58
- Reimbursement by Employer of Medical Expenses Outside the Work Place 59
- Employer-Provided Maternity Leave to Workers 60

CHAPTER SIX

EMPLOYEE PERFORMANCE AND MOTIVATION 63

OVERVIEW 63
- Absenteeism and Work Stoppages 63
- Training Courses for Workers 68
- Four Most Important Factors in Facilitating the Work of Male and Female Permanent and Seasonal Workers 69
- Four Most Important Factors Influencing Worker Satisfaction 73
- Four Most Important Factors Influencing Worker Motivation 77
- Four Least Important Factors Influencing Worker Motivation 81

CHAPTER SEVEN

SUMMARY OF FINDINGS AND CONCLUSIONS 87

SOCIO-DEMOGRAPHIC PROFILE OF EMPLOYEES 87
Major Employee Groups and Their Distribution 87
Mobility and Migration Patterns 88
Marital Status and Children 89
Level of Education 90
Worker Attitudes 90
EMPLOYMENT PATTERNS 91
Seniority and Experience of Employees 91
Remuneration 94
EMPLOYEE SERVICES AND HEALTH BENEFITS 96
Salary Advance and Union Membership 96
Employer-Provided Insurance and Health Benefits 97
EMPLOYEE PERFORMANCE AND MOTIVATION 98
Absenteeism and Work Stoppages 99
Self-Measurement of Job Performance by Workers 99
Training Courses for Workers 100
Factors Enhancing Work Performance 100
Factors Affecting Worker Satisfaction 101
Factors Influencing Worker Motivation 101
Least Important Factors Motivating Workers 102

LIST OF TABLES

Table		Page
1	Principal Positions by Sex by Type of Product	4
2	Employees by Permanent or Seasonal Status by Product Type	6
3	Positions by Industry Type by Sex	7
4	Male and Female Permanent and Seasonal Employees by Industry Type	8
5	Age Distribution of Permanent and Seasonal Employees by Type of Industry	9
6	Male and Female Permanent and Seasonal Employees Required to Change Residence for Current Employment	10
7	Long Distance Migration by Male and Female Permanent and Seasonal Employees	11
8	Number of Places of Residence Previous 10 years by Male and Female Permanent and Seasonal Employees	12
9	Marital Status of Male and Female Permanent and Seasonal Employees	13
10	Marital Status by Age Group for Permanent and Seasonal Employees	14
11	Average Number of Children by Sex for Non-Bachelor Permanent and Seasonal Employees	15
12	Level of Education Attained by Position by Sex	17
13	Level of Education Attained by Male and Female Permanent and Seasonal Employees	18
14	Mean Proportion of Worker's Salary in Total Family Revenue for Permanent and Seasonal Workers by Industry	19
15	Worker Sense of Covering Basic Food Needs with Salary	20
16	Desire by Workers to See Their Sons do the Same Type of Work	21
17	Desire by Workers to See Their Daughters do the Same Type of Work	21
18	Acceptability by Social Entourage of Worker's Occupation	22
19	Satisfaction with Seasonal Work by Male and Female Seasonal Workers	23
20	Seniority of Employees by Position in Horticultural Packing and Processing	25
21	Mean Experience of Male and Female Permanent and Seasonal Workers	26

22	Mean Total Experience in Horticultural Sector of Male and Female Permanent and Seasonal Workers by Industry Type	27
23	Principal Position by Type Occupied by Seasonal Workers during Off-Season Over Preceding Year	28
24	Method of Recruitment for Male and Female Permanent and Seasonal Employees	29
25	Method of Recruitment for Male and Female Permanent and Seasonal Workers	31
26	Average Hours Worked Daily by Employees	32
27	Average Number of Days Worked Per Month by Employees	34
28	Average Number of Months Worked Per Year by Employees	36
29	Type of Remuneration by Position	37
30	Type of Remuneration for Permanent and Seasonal Employees and for Permanent and Seasonal Workers	38
31	Average Monthly Salaries for All Positions and Averages by Salary Type for Employees	39
32	Mean Salary by Type for Permanent and Seasonal Workers	40
33	Mean Calculated Daily Salary of Male and Female Permanent and Seasonal Workers	41
34	Mean Annual Salary Income of Permanent and Seasonal Employees from All Sources by Position	42
35	Mean Annual Salary Income from All Sources for Male and Female Permanent and Seasonal Employees	44
36	Mean Annual Income from All Firms of Male and Female Permanent and Seasonal Workers	45
37	Mean Annual Income for Permanent and Seasonal Workers by Industry Type	46
38	Access to Employer Credit by Male and Female Permanent and seasonal workers	47
39	Mean Maximum Credit Advance per Year for Male and Female Permanent and Seasonal Workers	48
40	Union Membership of Male and Female Permanent and Seasonal Workers	49

103

41	Availability of Employer-Provided Health Insurance to Male and Female Permanent and Seasonal Workers	50
42	Availability of Employer-Provided Life or Permanent Disability insurance to Male and Female Permanent and Seasonal Workers	51
43	Employer-Provided Retirement or Pension Plan to Male and Female Permanent and Seasonal Workers	52
44	Employer-Provided Accidental Injury Insurance for Male and Female Permanent and Seasonal Workers	53
45	Employer-Provided Emergency Assistance to Male and Female Permanent and Seasonal Workers	54
46	Employer-Provided Family Planning Services to Male and Female Permanent and Seasonal Workers	54
47	Workers Inclined to Use Family Planning and Prenatal Services if Provided by Employer at Work Site	55
48	Employer-Provided Child Vaccination Services to Male and Female Permanent and Seasonal Workers	56
49	Employer-Provided Vaccination Services to Male and Female Permanent and Seasonal Workers	56
50	Employer-Provided Medical Examination at Hiring for Male and Female Permanent and Seasonal Workers	57
51	Employer-Provided First Aid Services to Male and Female Permanent and Seasonal Workers	58
52	Employer-Provided Medical Doctor at Work Place for Male and Female Permanent and Seasonal Workers	59
53	Reimbursement of Outside Medical Expenses of Workers by Employer	60
54	Employer-Provided Maternity Leave for Male and Female Permanent and Seasonal Workers	61
55	Mean Number of Days Male and Female Permanent Workers Missed Work through Paid Leave	64
56	Mean Number of Days Out Sick in One Year for Male and Female Permanent and Seasonal Workers	64
57	Total Mean Absence From Work Excluding Paid Vacation in One Year for Male and Female Permanent and Seasonal Workers	65

58	Mean Number of Days of Work Stoppage from Machine Breakdown during Previous Year for Permanent and Seasonal Workers by Type of Industry	66
59	Self-Measurement of Job Performance by Male and Female Permanent and Seasonal Workers	68
60	Exposure to Formal Training Courses in Past and Desire for Future Training by Workers	69
61	Worker Perception of Importance of Work Rhythm or Cadence on the Line for Job Performance	70
62	Worker Perception of Importance of Work Place Safety for Job Performance	71
63	Worker Perception of Importance of Supervisors' Instructions for Job Performance	72
64	Worker Perception of Importance of a Seated Work Position for Job Performance	73
65	Satisfaction of Male and Female Permanent and Seasonal Workers with Work Hours	74
66	Satisfaction of Male and Female Permanent and Seasonal Workers with Amount of Remuneration	75
67	Satisfaction of Male and Female Permanent and Seasonal Workers with Regularity of Remuneration	76
68	Satisfaction of Male and Female Permanent and Seasonal Workers with Level of Getting Along with Co-Workers	77
69	Importance of a Salary Covering More than Basic Needs for Worker Motivation	78
70	Importance of the Opportunity to Advance Career and Salary Level as Motivation for Workers	79
71	Importance of Employer-Provided Insurance as Motivation for Workers	80
72	Importance of Employer-Provided Credit and Savings Plan in Worker Motivation	81
73	Importance of Maternity Leave for Worker Motivation	82
74	Importance of Employer-Provided Family Planning Services for Worker Motivation	83
75	Importance of Child Care Facility at Work Place for Worker Motivation	84
76	Importance of Child Health Services at the Work Place for Worker Motivation	85

EXECUTIVE SUMMARY

The results of the Employee Survey presented in this volume are based on responses from 847 employees at all levels of 58 post-harvest horticultural firms in seven regions of Morocco. Primary focus, however, is placed on permanent and seasonal workers — about three-quarters of all employees. The firms represent eight product types — four from the packing industry (citrus, early-season vegetables and fruits, flowers, and cold storage) and four from processing (fruits and vegetables, olives and olive oil, wine manufacture, and spices and condiments).

This summary will first present some important conclusions and recommendations flowing from the findings of the survey, followed by a recapitulation of these findings.

KEY CONCLUSIONS

The fundamental objective of the Employee Survey was to create a baseline of information on the most important characteristics of employment in the post-harvest horticultural sector of Moroccan agribusiness. Follow-up studies, which will not need to be as comprehensive as the present effort, now have ample data upon which to build a substantial number of trends into the future.

The situation of the Moroccan labor force in post-harvest horticultural packing and processing is not simply an academic question. It is, rather, an issue going to the heart of efforts by the Moroccan government to liberalize the agribusiness sector in order to stimulate increased competitiveness in the struggle for European and North American markets. Increased competitiveness, however, will depend on more than improved managerial capacity or technological modernization. Over the long run, increasing the skills of the labor force, now overwhelmingly without specialized training or even basic formal education, will be critical if Morocco is to compete successfully in the global economy.

Although it may not appear that educating and training a largely seasonal work force can have tangible benefits to employers, this is incorrect for two reasons. Basic education skills, such as functional literacy and numeracy, combined with training in work-related skills, should have immediate impact on the motivation and performance of the work force. Education and training will also provide the incentives and the means by which unskilled employees become the skilled workers of tomorrow. Not only should productivity rise in the packing and processing plants of today, but also employers will have a growing cohort of workers to fill the increasingly technical work roles required in the future.

Employer-provided services and benefits are also important in building a loyal and productive work force capable of accompanying entrepreneurs into the 21st Century. It should be clear that employers cannot simply rely on the public sector to supply the skilled work force they will need to remain competitive or to shift into new endeavors in agribusiness export. They will need to develop the productivity of their increasingly skilled employees from within, training them at all levels, while continuing to attract the best graduates from public sector institutions.

While developing their human resources from within, Moroccan agribusiness entrepreneurs and managers cannot ignore the demographic characteristics of the sector's labor force. More than 75 percent of employees in post-harvest handling are unskilled workers. Reliance on workers is particularly high in the packing industry, where they constitute 82 percent of all employees. In processing firms, they are 67 percent of the total work force.

Moreover, seasonal workers drive the post-harvest horticultural sector, constituting 73 percent of all workers in the subsector and 94 percent of all seasonal employees, who, in turn, constitute three of every five employees. Furthermore, if the heart of the labor force in post-harvest horticulture is the seasonal worker, the face and form of the labor force are largely female. Fully 70 percent of this essential work force are women. Thus, slightly more than one-half of all workers in post-harvest horticulture are female seasonal workers; they are 39 percent of all employees in the subsector. Moreover, the categories of female seasonal employees and seasonal workers are virtually the same — 97 percent of all female seasonal employees are workers.

One important conclusion emerging from the Employee Survey is that increasing worker productivity and improving future performance necessitate focusing on the particular social characteristics, skill levels, and human resource development potential of the female seasonal work force. While it was generally known that female labor is important to agribusiness production and post-harvest handling, the Employee Survey, accompanied by the Qualitative Survey, now provides a substantially improved profile of the characteristics of these women — not without some surprises.

Most striking about these employees is their degree of single status: 77 percent of all female employees are single, compared with only 33 percent of males. If 71 percent of female permanent employees are single, the figure rises to nearly four of five (79 percent) of female seasonal employees. Of this large group of female seasonal employees, more than one-half (51 percent) are divorced (28 percent) or widowed (23 percent).

Female seasonal employees, in fact, are more likely to be divorced, widowed, or separated than are female permanent employee — 40 percent of female seasonals, compared with 29 percent of female permanents, are single through broken marriage. By way of contrast, male permanent employees, as a group, appear diametrically opposed to female seasonals in marital status: 77 percent are married and living with their spouses; only 23 percent are single.

Almost as striking as their single status is the extremely low level of education of workers in post-harvest horticulture; 59 percent have never been to school of any kind. Females workers are considerably less educated than their male counterparts: 70 percent of female workers have never been to school, compared with 38 percent of males. Fewer than 1 female worker in 10 has gone beyond primary school, compared with twice that many among male workers.

Although male and female seasonal employees have comparable seniority in the current firm and similar length of total experience in post-harvest horticulture, 44 percent of female seasonal workers are unemployed during the off-season compared with 29 percent of their male counterparts. Male workers also appear to work slightly more on average during the year for their principal firms than do female workers.

Salaries are not equal between male and female workers — for both permanents and seasonals. Combining workers paid by the hour, by the day, and by the month, it appears that male seasonals make about 21 percent more per day than female seasonals. This difference rises to 28 percent among permanents.

Given their lower salary level, a possible tendency to work fewer days during the year for the main firm, and greater frequency of unemployment during the off-season, it is not surprising that female seasonal workers earn 49 percent less during the year from agribusiness firms than do their male colleagues.

In the realm of employee services and benefits, there also appears to be a consistent bias toward male workers over females. Only 22 percent of female seasonal workers, compared with 30 percent of males, have access to credit, and the average yearly amount granted to male seasonals is nearly four times greater than that extended to females. Insurance and health benefits provided by employers clearly favor permanent employees to seasonals and males to females. The large group of female seasonal workers is consistently the least covered by these benefits.

The marginalization of the female seasonal labor force is reflected in its own lack of interest in formal training and in the use of family planning and prenatal services, should the services be provided by their employers. Thus, only 13 percent of female seasonal workers declare themselves interested in training, compared with 35 percent of male seasonals. In like manner, three female seasonal workers out of five claim they will not avail themselves of family planning and prenatal services if provided — twice the proportion of their male counterparts refusing these benefits.

The female seasonal worker is, not surprisingly, half as likely to belong to a union at the work place. Only one in ten female seasonals is a union member, compared with nearly one in five of male seasonal workers.

While consistently least favored by amount of pay, credit, and employer-provided services and benefits, female seasonal workers nevertheless appear to have a lower rate of absenteeism than males. Male seasonals are out sick 2.5 days more each year than female seasonals and miss over 6.5 more days of work for all reasons than do their female colleagues. Many of the days males take off from work other than for illness are used for new job seeking, indicating greater job mobility and employment opportunities than for females.

The figures on absenteeism tend to support employer perceptions of the female work force as serious, dependable, and hardworking. This is reinforced by the considerably greater tendency of female seasonal workers to judge their work performance on the basis of output: 62 percent of female seasonals consider satisfactory output the most important measure of their work performance, compared with 46 percent of male seasonal workers.

In view of the facts that female workers outnumber male workers, have a lower rate of absenteeism, view output as performance, and are ready to respond to incentives when they are recognized by employers as the driving force of their enterprises, it seems imperative that employers invest in these employees in the future. This can begin under current efforts to modernize the agribusiness export sector.

Among the efforts to improve the productivity and competitiveness of Moroccan export-oriented agribusiness, the USAID-funded Moroccan Agribusiness Promotion Project (MAPP) is well placed to extend its human capital development efforts to include basic education and skills development for workers, particularly those most in need — the female seasonal work force. As currently conceived, MAPP training efforts focus on mid-level managerial and technical staff to the exclusion of the large group of unskilled and uneducated workers. Because training of these workers will be substantially different from that envisaged for mid-level personnel, use of local subcontractors specializing in basic educational and vocational outreach is recommended.

Future Monitoring of Employment in Post-Harvest Horticulture

The Government of Morocco and MAPP should seek inexpensive ways to update the results of the Employee Survey at periodic intervals in the future. The first such update could accompany the final phase of MAPP in five years. Beyond basic employee categorization by industry and product type, work schedules, and remuneration patterns, attention should be paid to the state of employee services and benefits, particularly those available to the female seasonal work force. Indicators to be tracked should include:

- Levels of basic literacy and numeracy among workers, by sex and seasonality status;
- Number and proportion of workers trained, by sex, skill level, and type of training
- Absenteeism rates, by sex and skill level;
- Salary levels, by sex and skill level;
- Ratio of number of skilled workers to the total work force, by sex, seasonality of status, and type of skill;
- Proportion of workers receiving health insurance, by sex and seasonality;
- Proportion of workers receiving disability insurance or life insurance, by sex and seasonality;
- Proportion of workers receiving primary health care services (vaccinations and emergency medical care) and family planning or prenatal services at the work place, by sex and seasonality;
- Proportion of workers receiving medical examinations prior to employment, by sex and seasonality;
- Proportion of workers receiving maternity or paternity leave, and amount of paid leave, by sex and seasonality;
- Proportion of workers receiving a retirement or pension plan, by sex and seasonality; and
- Proportion of workers receiving credit, and average amount of credit, by sex and seasonality.

REVIEW OF FINDINGS

Profile of Employees

The Employee Survey categorized agribusiness employees into seven types, largely based on function within the firm: plant managers (firm directors), floor managers, secretaries, supervisors, foremen, workers, and others. Male and female permanent and seasonal workers, constituting 75 percent of all employees surveyed, represent an important focus of data analysis throughout this volume.

Overall, 59 percent of all employees are seasonal and 57 percent are female. Among the worker population, 73 percent are seasonal and 67 are percent female. Women constitute 70 percent of all seasonal workers.

Survey respondents are fairly evenly divided between the packing and processing industries: 53 percent are in packing and 47 percent are in processing. Seasonal employees are far more common in the packing industry than in processing, but there is little difference in share of males and females. In the packing industry, 23 percent of employees are permanent and 77 percent are seasonal; in the processing industry, 61 percent are permanent and 39 percent seasonal. Women constitute 59 percent of all employees in the packing industry and 54 percent in processing.

The proportion of workers among all employees varies significantly between the two industries and largely explains the variation in permanent or seasonal status. In the packing industry, 82 percent of employees are workers, but only 67 percent in processing are workers. Female workers constitute 69 percent of workers in the packing industry and 65 percent in processing.

The age distribution of employees varies between the packing and processing industries. Packing firms tend to employ a larger proportion of younger employees than do firms in processing. Thus, 47 percent of all employees in packing are age 30 or younger; in processing, this group is only 33 percent. Of those nine employees under age 16, none are permanent personnel; eight of the nine are in the packing industry. On the other hand, the packing industry counts only 18 percent of its employees older than 45, compared with 25 percent in processing.

Overall, employees demonstrate both a high degree of migration from their birthplace and considerable residential stability over the medium to long term. About 96 percent of all respondents are not native to the province where they now reside and work. On the other hand, 87 percent of employees report but one residence over the preceding 10 years. Finally, only 18 percent of employees changed residence to take their current jobs. All these trends show little or no difference by sex or by permanent or seasonal employment status.

A majority (57 percent) of permanent and seasonal employees in post-harvest horticulture are single: 35 percent have not yet married, 11 percent are divorced, 10 percent widowed, and 1 percent married but separated. There are strong gender-linked differences, however. Two-thirds (67 percent) of male employees are married and living with their spouses; only 23 percent of females are in this status.

The 77 percent of female employees currently single consist of 40 percent who have not been married, 19 percent who are divorced, 18 percent widowed, and nearly 1 percent married but separated. Female seasonal employees exhibit the highest degree of single status (79 percent) of all employee groups, followed by female permanent (71 percent), male seasonal (44 percent), and male permanent employees (23 percent). The marital status of male permanent employees is thus opposite to that of female seasonals. Furthermore, female seasonals are more likely to be divorced, widowed, or separated than female permanents — 40 percent of female seasonals, compared with 29 percent of female permanents, are single through broken marriage.

Overall, about 11 percent of all employees in post-harvest horticulture have not yet married by age 31. By age 41, however, this proportion has reduced to 2 percent. On the other hand, divorce begins relatively early — 27 percent of all divorced employees are age 30 or younger.

Excluding all persons never married, employees report 2.9 living children. Male employees have more children on average than do females, particularly female permanent employees. The same is true for the worker population taken separately.

The proportion of employees who have never attended any form of school is 48 percent. This proportion rises to 59 percent for the worker group — 38 percent for males and 70 percent for females. Among permanent employees, 32 percent have never been to school; among seasonals, the figure is nearly twice as high — 58 percent.

Female workers have the lowest levels of education of all groups — 70 percent have never been to any form of school, and only 9 percent have gone beyond primary school. No female worker has gone beyond secondary school; four males have done so.

Overall, workers claim to provide about 79 percent of total household income, a figure rising to 88 percent for permanents. Worker income as share of total household income does not vary significantly from the average between the packing and processing industries, except for permanent workers in processing, who claim to cover 92 percent of total income.

On the other hand, 48 percent of all workers maintain that their salaries do not even meet basic food needs for their families. Half the seasonal workers felt unable to meet basic nutritional needs with their incomes, compared with 41 percent for permanents. Female seasonals were least secure in covering basic food needs, male permanents most confident.

Serious worker dissatisfaction with occupational status is revealed by attitude toward the desirability of offspring taking up the same employment as their parents. Overall, few workers felt their sons and daughters should follow them into the post-harvest industries.

In spite of a lack of desire to recommend their occupation to sons and daughters, 79 percent of workers felt their work to be socially acceptable. The difference by sex is, somewhat surprisingly, slight. Female permanents (90 percent) were most confident of the approval of family, relatives, and neighbors, while only 77 percent of female seasonals and male permanents and seasonals shared this opinion. The high figure for female permanents underscores the value of securing a permanent position, especially for women for whom most opportunities in post-harvest horticulture are only seasonal.

Seniority and Experience of Employees

Seniority of employees in their current positions differs between the packing and processing industries. Seasonal employees in packing have an average total seniority of 43 months, which means they have returned each season for the preceding six or seven years. On the other hand, permanent employees in the packing industry indicate the least seniority of all groups, with only 13 months in their current positions. These seniorities can be compared with those in processing: permanent employees have 35 months of seniority and seasonals 20 months.

Workers in packing have more seniority than the average for all employees (54 months), but little more in processing. Permanent workers in packing, however, have the least seniority of any group, with only 7 months of service. There is little difference in seniority by sex in seasonal work.

Experience in the horticultural sector for permanent and seasonal workers includes seniority with the current firm and previous experience of a similar nature in related firms. Overall, permanent workers have 38 percent more total experience than do seasonal workers. Male permanents have the longest experience in horticulture, with 11 years of service; female seasonals have the least, with 8 years.

In addition to their principal employment in post-harvest horticulture, to which many return every year, seasonal workers tend to have another major activity in the off-season. However, about 39 percent of all workers are unemployed during this period. The proportion of females unemployed in the off-season is nearly 2.5 times greater than that for males, attaining 44 percent of female seasonals.

Nearly one-half of all employees (46 percent) obtained their positions by presenting themselves at the doors of the firm. Another 30 percent used family connections or friends within the firm to secure employment. Recruitment by intermediaries accounts for only 9 percent of employment. Female and seasonal employees are much more likely than others to go directly to the firm to seek employment.

On average, employees work 8.6 hours per day — workers only slightly less (8.5 hours). Differences in daily hours worked are not significant between permanent and seasonal or male and female employees.

On average, employees work about 25 days per month. Permanent employees work about two days more than seasonals; among seasonals, those in processing work three days more than their counterparts in packing. Sex differences in number of workdays among workers or permanent and seasonal employees are nil.

Overall, employees work an average 8.5 months per year. Permanent employees work 11.3 months per year, but seasonals stay only 6.6 months. Gender-linked differences in months worked each year are insignificant. Workers report an average of 7.8 months worked, with little difference between males and females.

Slightly more than half of employees and 62 percent of workers labor for an hourly wage. One-fifth of employees and 26 percent of workers earn a daily wage, and 27 percent of employees but only 12 percent of workers report payment of a monthly wage.

Workers as a group are particularly likely to be paid on an hourly basis. Although two-thirds of workers are paid an hourly wage, 75 percent of all other employees are paid a monthly wage. Type of remuneration also depends to a large degree on the type of employment status: 33 percent of permanent employees and 65 percent of seasonals are paid an hourly wage.

Few permanent employees and only 28 percent of all seasonal employees are paid on a daily wage basis. On the other hand, 57 percent of permanent employees and 31 percent of permanent workers are paid on a monthly basis, compared with 7 percent of all seasonal employees and 5 percent of seasonal workers.

Those workers paid an hourly wage receive an average of DH 6.3 (about $0.70). Based on average hours per day and days per month, this wage translates to about DH 1,325 ($147) per month. Workers paid on a monthly basis earn slightly more than this; workers paid on a daily basis (26 percent of all workers) earn about one-third less.

Comparing all salaries by converting them to a common daily wage, it can be seen that workers overall earn an average daily wage of about DH 48 ($5.33). Permanent workers earn somewhat more

than seasonals, and males overall one-fourth more than their female colleagues. Among both permanent and seasonal workers, males earn more on average than do females.

Annual income of all workers is DH 12,440 ($1,382) — DH 11,195 DH ($1,244) from the principal firm and, for seasonal workers, an additional DH 1,360 ($151) from other firms during the year. The average permanent worker makes DH 18,365 ($2,040) per year all from one source, while the seasonal worker — largely because of the substantially shorter work season — earns only DH 10,530 ($1,170), including an average of DH 1,830 ($203) from other firms during the year. For seasonal workers, this is the equivalent of an additional 34 days of work outside the current firm. Seasonal workers, moreover, always earn less than their permanent counterparts — 36 percent less than permanents in packing and 45 percent less than permanents in processing.

Employee Services and Health Benefits

Slightly more than one-fourth of workers receive credit from their employers over the course of the year. Permanent workers and males benefit disproportionately from this facility. The average amount of credit received by workers during the year is DH 2,100 ($233), or about 159 percent of one month's average salary. Permanent workers receive nearly twice the amount that seasonals receive, in part because of their longer period of employment. Among permanent workers, males receive more than three times the amount received by females; among seasonals, males receive nearly four times the sum granted to females.

Employer-Provided Insurance and Health Benefits

Of 13 common insurance and health benefits employers might provide to their employees, only three are actually provided to more than half the workers: first aid services at the work place (79 percent of employees), emergency medical assistance (64 percent), and accidental injury insurance (61 percent). Four other benefits are now provided to between 25 percent and 36 percent of workers: a retirement or pension plan (36 percent), access to maternity or paternity leave (32 percent), a medical doctor at the work place (25 percent), and partial reimbursement of medical expenses outside the work place (25 percent).

Other benefits provided to at least some workers by their employers are adult vaccination services (17 percent), health insurance coverage (16 percent), a medical examination prior to beginning work (11 percent), life or permanent disability insurance (9 percent), family planning services (nil), and child vaccination services (none reported). Although very few workers reported the existence of family planning services at the work place, about 60 percent of all workers (70 percent of those responding to the question) declare their interest in using prenatal and family planning services, if provided by their employer.

In general, permanent workers and males appear to enjoy these benefits considerably more than do seasonals and females. The large group of female seasonal workers is usually the least covered by these employer-provided benefits. This is also true with regard to interest in future employer-provided family planning services, probably reflecting the high level of single status among female workers and the cultural inappropriateness of expressing interest in such services when single.

Absenteeism and Work Stoppages

Workers miss about 13 days of work on average each year, excluding 20 days of paid leave available only to permanent workers. Sick days explain about half of absenteeism. Permanent workers take nearly twice as many sick days off as do seasonals, although this is in proportion to their longer period of employment each year.

Males tend to take more time off than females. Male permanents take 50 percent more leave than do females, while male seasonal workers take 67 percent more time off than their female counterparts. This is probably because of the much greater number of days they take off for job seeking.

Idleness in the work place from machine breakdown does not seem to be a major problem for workers. Workers report about 1.5 days of factory idleness from machine breakdown, although there appears to be about five times more delay in processing than in packing. Overall, delays are not significant, and loss of productivity from machine breakdown appears of little importance in the packing and processing industries.

Self-Measurement of Job Performance

More than half of all workers consider achieving satisfactory output as most important in measuring job performance. Female and seasonal workers are stronger in their appreciation of this measure than are males and permanents.

Less than one-fifth of workers consider professional behavior an important means of gauging work performance, and only 1 in 10 felt that efficiency and speed in doing one's work are important indicators of successful performance. Although permanent and seasonal workers differed little in their appreciation of these factors, males value these two measures of work performance as more important than do females. More than one-fifth of workers, particularly females, are incapable of providing a measure, subjective or objective, by which they may judge their job performance.

Worker Training

Very few workers have received any formal training. On the other hand, about one in five workers expresses a desire for such training. Permanent and male workers value this prospect more than do seasonal and female workers. Least interested in training is the important group of female seasonal workers. Most interested are the male permanents.

Factors Enhancing Work Performance

According to workers, the four most salient factors in facilitating their work are work rhythm (cadence), safety of equipment, supervisors' instructions, and a seated work position. Overall, work rhythm is rated the top issue by the greatest number of respondents. The tendency for female workers to place greater value on work rhythm than males do is probably related to the less specialized, more routine nature of much of their work.

Although safety of equipment was rated less often as the most important issue enhancing work performance, 78 percent of workers consider this an important issue. Seasonal and female workers tend

to place greater importance on this factor than do permanent workers and males. This is particularly the case for female seasonal workers, probably because of their greater exposure to machinery.

Third among issues rated, clarity and appropriateness of supervisors' instructions are considered by 70 percent of all workers to constitute an important factor in facilitating work performance. Seasonals place somewhat greater importance than permanents on this issue. Female seasonal workers place the greatest emphasis on this issue, because of the speed with which operations have to be carried out on the line.

Factors Affecting Worker Satisfaction

Of the four top-rated motivating factors for workers, a salary meeting more than basic needs is by far the most popular. About 96 percent of all workers rate this issue as important. Second in importance is the opportunity to advance one's career and increase salary level. Nearly as many workers consider this an important issue, partly because the notion of salary advance is included in the issue of career advancement. Female seasonal workers value this factor least of all groups, probably because the concepts of career and resulting pay steps have little meaning to this numerically important but least empowered category of workers.

Other factors fall far below these as issues, although many workers consider them important. Employer-provided insurance is felt important by 95 percent of workers, although it receives few top rankings. Consistency of response between permanent and seasonal or male and female workers is remarkable. However, consideration of the importance of this factor reflects far more a desire for such coverage than a recognition of its current value in motivating work performance, because health insurance coverage is enjoyed by only 34 percent of permanent workers and 9 percent of seasonals. Even fewer workers now enjoy disability or life insurance. However, accidental injury insurance from employers is covered for most workers.

Credit and a savings plan constitute the issue fourth in perceived importance by workers, with 75 percent of workers considering it of importance in motivating them. Permanent workers place greater importance on this issue than do seasonals. Again, while these benefits are of interest to workers, they reflect more a desire than a reality, since only about one-fourth of workers report actually receiving credit from their employers.

Least Important Factors Motivating Workers

Workers gave little importance to several basic health services as motivational factors. These services may deserve attention because they could contribute to worker productivity. Among these factors are maternity leave, favored more by female workers; family planning services, favored more by seasonal workers; child care at the work site, favored more by seasonal and female workers; and child health services, favored more by seasonal and male workers.

CHAPTER ONE

INTRODUCTION

SECTORAL FOCUS

The agribusiness focus of the Employee Survey is eight product types of the packing and processing industries of the post-harvest horticultural sub-sector. Cold storage has been subsumed in the analysis under packing (conditionnement). While many of these products are exported, this is not true for all. The industry and product groups of the study are:

Packing

(1) Citrus

(2) Early season vegetables and fruits

(3) Flowers

(4) Cold storage

Processing

(5) Fruits and vegetables

(6) Olive oil and olives

(7) Winemaking

(8) Spices and condiments

EMPLOYEE FOCUS

The social focus of the Employee Survey is the socio-demographic characteristics of the employees of the two post-harvest horticultural industries and their remuneration, work benefits, performance, satisfaction, and motivation. Following a presentation of the overall characteristics of employment within the sample of 58 firms, emphasis is placed entirely on the large group of workers — over 75 percent of the 847 employees surveyed. These workers will be examined along two axes: nature of the employment commitment — permanent or seasonal — and sex of employee.

CHAPTER TWO

SOCIO-DEMOGRAPHIC PROFILE OF EMPLOYEES

EMPLOYEE TYPES AND DISTRIBUTION BY INDUSTRY

Positions by Sex in All Subsectors

Positions in the 58 firms sampled were identified functionally, not by formal title or by technical qualification. Thus, personnel were divided into the following groups: enterprise and other high-level managers (gerants); floor or line managers (chefs de fabrication); secretaries; supervisors; foremen (caporaux); workers; and others. The last category includes office personnel other than secretaries, technical personnel, some specialized workers, drivers, watchmen, janitorial staff, and so on.

Probably the most homogeneous categories identified by this survey are secretaries, foremen, plant managers, and workers, since supervisors and floor managers certainly include a wide variety of technical, salary, and responsibility levels. Care must be taken in future surveys of this type to identify a priori parameters allowing the grouping of personnel into coherent categories for use in data description and analysis.

The large group of respondents who identified themselves as workers (ouvriers) is not only numerically important (75 percent of the total sample), but is certainly preponderantly unskilled, workers with skills having identified themselves with more precise occupations within enterprises. The sample of workers thus approaches the number given by firm personnel directors in the enterprise survey, where 84 percent of all employees were declared to be unskilled workers.[1]

Within the large group of permanent and seasonal workers, the employee survey found the following proportions of employees types:

1) Plant managers (directors) —	1%
2) Floor (line) managers —	4%
3) Secretaries —	3%
4) Supervisors —	3%
5) Foremen —	2%
6) Others —	11%

Most decimals in the text and tables will be rounded to the nearest whole number. This will be the case for percentages and most other numerical data. Occasionally, to indicate fine differences, salary or time data will be rounded to the nearest tenth.

TABLE 1

PRINCIPAL POSITIONS BY SEX BY TYPE OF PRODUCT
(N = 847)

Product Type	Plant Manager		Floor Manager		Secretary		Supervisor		Foreman		Worker		Other		Total		General Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Citrus packing	1	-	6	-	1	2	2	-	2	-	57	98	17	1	86	101	187 (22%)
Early-season vegetable and fruit packing	1	-	9	-	-	-	5	1	3	1	31	89	4	-	53	91	144 (17%)
Flower packing	1	1	2	-	-	2	1	1	2	-	20	49	1	-	27	53	80 (9%)
Cold storage	-	-	2	-	-	1	-	-	1	-	9	19	7	1	19	21	40 (5%)
Fruit & vegetable processing	1	-	4	1	1	4	3	1	1	1	28	48	20	6	58	61	119 (14%)
Olive & olive oil processing	1	1	10	2	2	10	6	2	7	1	40	108	9	1	75	125	200 (24%)
Spices & condiment processing	1	-	-	1	-	2	1	-	-	-	7	16	2	2	11	21	32 (4%)
Wine manufacture	-	-	-	-	-	3	-	-	-	-	18	2	19	3	37	8	45 (5%)
Total	6	2	33	4	4	24	18	5	16	3	210	429	79	14	366	481	847 (100%)

Table 1 below contains the full breakout of all employees by their functional position within the firms. As can be seen, women predominate — 57 percent — in the sample, a figure close to the 61 percent declared by personnel managers in the enterprise survey. Two employee groups are largely dominated by women — secretaries (86 percent) and workers (67 percent). The preponderance of females among workers comes from their very large proportion of seasonal workers (70 percent), although they also predominate among permanent workers (57 percent). These figures from the sample approximate those given by personnel managers in the enterprise survey for the proportion of females among unskilled seasonal workers (74 percent), but are significantly higher than those for unskilled permanent workers (46 percent) and all unskilled workers (56 percent).

With the exception of wine manufacture, where male workers greatly outnumber their female counterparts (90 percent to 10 percent), females are in the great majority across all product groups, ranging from a low of 63 percent in citrus packing and fruit and vegetable processing to a high of 74 percent in early-season vegetable and fruit packing.

Permanent and Seasonal Positions by Sex in All Subsectors

Distribution of employees by permanent or seasonal status and by sex is broken out in Table 2 for the 8 product groups. Overall in the post-harvest horticultural sector, 40 percent of all employees surveyed are permanent, 60 percent seasonal. Among all permanent employees men predominate (60 percent) compared to their position among permanent workers only (43 percent). Among seasonal employees females predominate (68 percent), a proportion very similar to their numerical superiority among seasonal workers (70 percent).

Across product lines the proportion of permanent employees varies from 98 percent in the wine industry to a low of 13 percent in early-season vegetable and fruit packing. Citrus packing with 18 percent permanent employees is close to early season packing, because of the nature of the industry. The highest level of permanent employees beyond winemaking is olive and olive oil processing with 62 percent. Otherwise, several of the product groups lie fairly evenly divided between permanents and seasonals: spices and condiments (50 percent permanents); fruit and vegetable processing (48 percent permanents); and flower packing (44 percent permanents). Cold storage facilities, although the sample is small, have only 36 percent of permanent employees, a figure revealing the marked seasonal nature of the activities.

Among permanent employees the proportion of women in the sample ranges from lows of 0 percent in early-season packing, 9 percent in citrus packing, and 18 percent in winemaking to highs of 69 percent in spices and condiments, 56 percent in olive and olive oil processing, and 54 percent in flower packing. The remaining proportions of women by product group are: 43 percent in cold storage and 40 percent in fruit and vegetable processing.

Among seasonal employees by product type, women are largely in the majority, except in winemaking where only one seasonal employee (male) was interviewed. Otherwise, women constitute from 76 percent of seasonal employees in flower packing to a low of 60 percent in cold storage, passing through 73 percent in early-season packing, 70 percent in olive and olive oil processing, 64 percent in citrus packing, 63 percent in spices and condiment processing, and 61 percent in fruit and vegetable processing.

TABLE 2

EMPLOYEES BY PERMANENT OR SEASONAL STATUS BY PRODUCT TYPE
(N = 836)

Product Type	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Citrus Packing	31	3	55	98	86	101	187 (22%)
Early-season Vegetable and Fruit Packing	19	-	33	91	52	91	143 (17%)
Flower Packing	16	19	11	34	27	53	80 (10%)
Cold Storage	8	6	10	15	18	21	39 (5%)
Fruit & Vegetable Processing	34	23	24	38	58	61	119 (14%)
Olive & Olive Oil Processing	52	66	22	51	74	117	191 (23%)
Spices & Condiment Processing	5	11	6	10	11	21	32 (4%)
Wine Manufacture	36	8	1	-	37	8	45 (5%)
Total	201	136	162	337	363	473	836 (100%)

Major Positions by Sex in Packing and Processing Firms

Table 3 groups the 8 product types by industry — **packing** (citrus, early-season fruits and vegetables, flowers, cold storage) and **processing** (fruit and vegetable, olive and olive oil, spices and condiments, wine) — for clarity of exposition. The sample is fairly evenly balanced, with 53 percent of respondents in packing/storage and 47 percent in processing. Males constitute 41 percent of all employees in packing and 46 percent in processing. Among workers males are 31 percent of the total in packing and 35 percent in the processing industry.

TABLE 3

POSITIONS BY INDUSTRY TYPE BY SEX
(N = 847)

Industry Type	Plant Manager		Floor Manager		Secretary		Supervisor		Foreman		Worker		Other		Total		General Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Packing and Storage	3	1	19	-	1	5	8	2	8	1	117	255	29	2	185	266	451 (53%)
Processing	3	1	14	4	3	19	10	3	8	2	93	174	50	12	181	215	396 (47%)
Total	6	2	33	4	4	24	18	5	16	3	210	429	79	14	366	481	847 (100%)

Male and Female Permanent and Seasonal Employees by Industry Type

Table 4 breaks out all employees by sex and by permanent or seasonal for the two industries of the post-harvest horticultural sector. 23 percent of all employees in the packing industry are permanent, while 77 percent are seasonal. In the processing industry as a whole, 61 percent of employees are permanent and 39 percent seasonal. The greater number of seasonal employees in packing is explained by their reliance on seasonal workers. Thus, 82 percent of employees in the packing industry are workers, while only 67 percent are workers in processing (cf. Table 3).

Distribution of employees by sex also varies somewhat between the two industries. While 73 percent of permanent workers are male and 27 percent female in packing, the inverse is true among seasonal workers, where 69 percent are female and only 31 percent male. On the other hand, the proportion of males and females among permanents in processing is fairly balanced — 54 percent are male and 46 percent female — but among seasonals the disparity returns — 65 percent are female and 35 percent male.

TABLE 4

MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES BY INDUSTRY TYPE
(N = 836)*

Industry Type	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Packing and Storage	74	28	109	238	183	266	449 (54%)
Processing	127	108	53	99	180	207	387 (46%)
Total	201	136	162	337	363	473	836 (100%)

* 3 males and 8 females termed "contractors" have been removed from the sample. Their status is rare and unclear.

Permanent and Seasonal Employees by Age in Packing and Processing Firms

Table 5 presents the age distribution of all employees by industry type. The packing industry has a larger number of younger employees than is the case in processing. Thus, 47 percent of all employees are 30 years old or less in packing, while this proportion is only 33 percent in processing. Eight seasonal employees in packing are less than 16 years old compared to one in processing. No permanent employees are less than 16 in either industry. The youngest employee in the sample is 12 years old, the oldest 64.

In the middle years, however, the age distribution becomes similar. Nearly two-thirds of employees in packing (63 percent) are between 21 and 40 years old compared to 60 percent in processing. Adding those employees in the next age group (41-45), the distribution swings in favor of processing — 69 percent of employees in packing are between 21 and 45 years old, while 72 percent are between these ages in the processing industry.

Among the older employees, 46 years old and above, processing counts 25 percent of its work force in this range, while packing has only 18 percent of its employees in this bracket. 8 percent of employees are 56 years or older in processing, while only 4 percent are of this age in packing.

Permanent employees tend to be more grouped in the middle age groups than seasonal employees, where there are more younger and more older employees. Thus, 75 percent of permanent employees in packing and 83 percent in processing are between the ages of 21 and 45. 15 percent of permanent employees in packing are older than 45 and 9 percent younger than 21, while among processing permanents 27 percent are above 45 and 1 percent are below 21.

Among seasonal employees, on the other hand, 68 percent in packing and 72 percent in processing are between 21 to 45 years old. 18 percent of seasonal employees in packing are older than 45 and 14 percent younger than 21, while among processing seasonals 22 percent are above 45, and 6 percent are below 21.

TABLE 5

AGE DISTRIBUTION OF PERMANENT AND SEASONAL EMPLOYEES BY TYPE OF INDUSTRY
(N = 834)

Industry and Age Groups	Permanent Employees	Seasonal Employees	Age Group Total
Packing & Storage	101 (12%)	346 (41%)	447 (54%)
< 16	-	8	8
16 - 20	9	39	48
21 - 25	18	54	72
26 - 30	20	61	81
31 - 35	13	40	53
36 - 40	22	53	75
41 - 45	4	27	31
46 - 50	11	23	34
51 - 55	2	23	25
56 - 60	2	14	16
61 +	-	4	4
Processing	235 (28%)	152 (18%)	387 (46%)
< 16	-	1	1
16 - 20	3	8	11
21 - 25	22	15	37
26 - 30	47	32	79
31 - 35	34	23	57
36 - 40	39	20	59
41 - 45	27	20	47
46 - 50	25	11	36
51 - 55	22	8	30
56 - 60	16	12	28
61 +	-	2	2

MOBILITY AND MIGRATION PATTERNS OF EMPLOYEES

Short-Term Migration of Male and Female Permanent and Seasonal Employees

Table 6 presents the breakout of employees required to change their place of residence in order to accept their present position. This is fundamentally an indicator of short-term migration for employment. As the table indicates, 18 percent of employees changed residence for current employment, while 82 percent did not.

There is, however, little difference between permanent and seasonal employees: only 17 percent of all permanents and 18 percent of seasonals had to change their residence for the purpose of taking employment. This tends to confirm the fact that seasonal employees return each year to the same employment.

There is, furthermore, little difference between male and female seasonal employees in short-term mobility for employment. 17 percent of females and 20 percent of males have changed residence to take up their current work. On the other hand, there is a significant difference in mobility by gender among permanents: 23 percent of males, but only 8 percent of females, have changed their address to accept the current job. Overall, a clear pattern of greater male mobility for work is revealed by the fact that 22 percent of all males have changed their residence, while only 15 percent of all females have done so. This tends to confirm the greater freedom of males in Moroccan society to relocate for employment purposes.

TABLE 6

MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES REQUIRED TO CHANGE RESIDENCE FOR CURRENT EMPLOYMENT
(N = 820)

Obligation to Change Residence	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Yes	45	11	32	57	77	68	145 (18%)
No	152	122	128	273	280	395	675 (82%)
Total	197	133	160	330	357	463	820 (100%)

Long-Term Migration of Male and Female Permanent and Seasonal Employees

Table 7 presents the longer-term migration pattern for post-harvest horticultural employees. Fully 96 percent of all employees are not native to the province in which they now reside. Only 5 percent of all males and 3 percent of females now reside and work in their province of birth. 6 percent of all seasonals and 1 percent of permanents still reside in their province of birth. 4 percent of female seasonals

and 10 percent of males are native to their current province, while 1 percent of both male and female permanent employees are native. While moving from one's birth province is clearly the rule, the trend is, nonetheless, somewhat stronger among permanent employees and female seasonals.

TABLE 7

LONG DISTANCE MIGRATION BY MALE AND
FEMALE PERMANENT AND SEASONAL EMPLOYEES
(N = 836)*

Migration Status	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Native to Province	2	2	15	12	17	14	31 (4%)
Migrant to Province	199	134	147	325	346	459	805 (96%)
Total	201	136	162	337	363	473	836 (100%)

* Defined as actually residing in province other than that of birth.

Residential Mobility of Male and Female Permanent and Seasonal Employees

In spite of an extremely high rate of out-migration from employees' province of birth (96 percent), Table 8 indicates that recent mobility, measured by the number of residences over the previous 10 years, is rather low, with 87 percent of all employees reporting only one residence, 10 percent reporting 2 or 3, and 3 percent claiming more than 3. 88 percent of women and 87 percent of men report only one residence over the previous 10 years 85 percent of all seasonal employees and 90 percent of all permanents report but one residence in the previous decade. This pattern also remains relatively stable by gender of permanent and seasonal employee: 88 percent of male seasonals and 84 percent of female seasonals have had one residence in the last decade, while 87 percent of male permanents and 96 percent of female permanents claim this number. Female permanent employees appear to be the most stable of employees, a pattern confirmed in Table 6. However, fully 99 percent of the female permanent workforce no longer resides in its province of birth (cf. Table 7).

TABLE 8

NUMBER OF PLACES OF RESIDENCE PREVIOUS 10 YEARS BY MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES
(N = 836)

Number of Places of Residence	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Only 1	174	130	142	284	316	414	730 (87%)
2 - 3	20	4	16	43	36	47	83 (10%)
4 - 5	7	2	3	8	10	10	20 (2.5%)
6 +	-	-	1	2	1	2	3 (0.5%)
Total	201	136	162	337	363	473	836 (100%)

FAMILY STATUS OF EMPLOYEES

Marital Status of Male and Female Permanent and Seasonal Employees

Marital status of all employees is indicated in Table 9. 35 percent of employees are bachelors, 11 percent are divorced, 10 percent are widowed, 42 percent are married and together, 1 percent are married but living separately. While nearly half of all employees are married and together, there are strong gender differences. Although 67 percent of all males are married and together, only 23 percent of females are in this status. On the other hand, fully 77 percent of all female employees of this sample are single: 40 percent are bachelors; 19 percent are divorced; 18 percent are widowed; and about 1 percent are married but separated. 57 percent of all permanents and 32 percent of all seasonals are married and together, but the pattern varies by gender. While 76 percent of male permanents and 56 percent of male seasonals are married and together, only 29 percent of female permanents and 21 percent of female seasonals are of this status. 40 percent of female seasonal employees are divorced, widowed, or separated, compared to 29 percent of their permanent counterparts. 39 percent of female seasonals and 42 percent of female permanent employees are still bachelors.

The very high proportion of single status among female employees, particularly seasonal employees (79 percent), as well as the high percentage — 37 percent — of divorced, widowed, and separated (40 percent of seasonal employees, 29 percent of female permanents) compared to their male counterparts is to be noted. This sets this work force apart as unique.

126

TABLE 9

MARITAL STATUS OF MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES
(N = 836)

Marital Status	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Bachelor	48	57	58	130	106	187	293 (35%)
Divorced	-	15	5	74	5	89	94 (11%)
Widowed	1	22	3	61	4	83	87 (10%)
Married (cohabiting)	152	40	91	71	243	111	354 (42%)
Married (separated)	-	2	5	1	5	3	8 (1%)
Total	201	136	162	337	363	473	836 (100%)[2]

Marital Status by Age Group for Permanent and Seasonal Employees

The five marital status categories are broken out in Table 10 by age group and permanent or seasonal status. Bachelors are, not surprisingly, largely confined to the younger age groups: only 11 percent of employees over 30 years old have still not married, a proportion reduced to 2 percent for those over 40. On the other hand, divorce begins relatively early among these employees: 27 percent of all divorced employees are 30 years old or under.

31 percent of all permanent employees are bachelors and 4 percent are divorced, compared to 38 percent and 16 percent, respectively, for seasonals. The high divorce rate for seasonal employees stands out here.

Widowed employees are, naturally, quite common in the older age groups. 51 percent of widows and widowers are older than 45 years. However, there is a remarkable number of younger widows and widowers: 31 percent of all widowed employees are 40 years old or less. The vast majority — 74 percent — of widowed employees are found between the ages of 36 and 60. 7 percent of permanent employees are widowed compared to 13 percent for seasonals, a phenomenon similar to the disparity in divorce rate for the two types of employees.

[2] Throughout the tables of this study percentages will be rounded off, resulting occasionally in a total slightly more or less than 100%.

While separation in formal marital status appears rare — only 7 employees of 834 claim this status (5 of 7 are seasonals), the majority of employees are married and living together. Thus, the survey shows that 42 percent of all employees are married and cohabitating — 57 percent of permanent employees and 33 percent of seasonals. The pattern for still married permanents and seasonals appears similar.

TABLE 10

MARITAL STATUS BY AGE GROUP FOR PERMANENT AND SEASONAL EMPLOYEES
(N = 834)

Age Group	Bachelor		Divorced		Widowed		Married & Living Together		Married & Living Separately		Total		Grand Total
	P	S	P	S	P	S	P	S	P	S	P	S	
< 16 yrs	-	9	-	-	-	-	-	-	-	-	-	9	9 (1%)
16 - 20	12	46	-	1	-	-	-	-	-	-	12	47	59 (7%)
21 - 25	36	52	1	6	-	1	3	9	-	1	40	69	109 (13%)
26 - 30	33	49	4	13	-	6	28	23	2	2	67	93	160 (19%)
31 - 35	15	18	-	21	-	4	32	20	-	-	47	63	110 (13%)
36 - 40	3	14	4	14	7	9	47	36	-	-	61	73	134 (16%)
41 - 45	3	-	3	11	4	12	21	23	-	1	31	47	78 (9%)
46 - 50	2	-	3	4	2	11	29	19	-	-	36	34	70 (8%)
51 - 55	-	-	-	2	5	13	19	15	-	1	24	31	55 (7%)
56 - 60	1	-	-	7	5	6	12	13	-	-	18	26	44 (5%)
61 +	-	-	-	-	-	2	-	4	-	-	-	6	6 (1%)
Total	05	188	15	79	23	64	191	162	2	5	336	498	834 (100%)

Number of Children of Male and Female Permanent and Seasonal Employees

Removing never married permanent and seasonal employees, we can isolate those employees who are in a position to have legally recognized children. Of this group, the average number of living children is 2.9. Seasonal employees have a slightly higher average number of children than permanents

— 3 to 2.8 children per person. Male permanent employees have 3.3 children compared to 2 for their female counterparts. Male seasonals also have on average more children than female seasonals: 3.3 to 2.8 children per person.

Within the group of permanent and seasonal workers, 65 percent claimed a past or present marital status permitting them to declare children, a figure virtually identical to that for all employees. Workers have an average of 3 children per person, but the disparity between males and females is greatest: male workers have 3.4 children compared to 2.7 for female workers.

TABLE 11

AVERAGE NUMBER OF CHILDREN BY SEX FOR NON-BACHELOR PERMANENT AND SEASONAL EMPLOYEES (N = 553) and All Workers (N = 413)

Employee Category	Average Number of Children
All Employees	**2.9** (S.D. = 2.5)
Permanent Employees	**2.8**
Males	3.3
Females	2.0
Seasonal Employees	**3.0**
Males	3.3
Females	2.8
Workers	**3.0**
Males	3.4
Females	2.7

EDUCATION LEVELS OF EMPLOYEES

Level of Education by Position and by Sex

Table 12 indicates the educational levels reached by the various categories of employees. Overall, 48 percent of all employees have not been to school at all. This proportion rises to 59 percent for workers, 38 percent for male workers and 70 percent for females.

Among all employees 4 percent have only a traditional Koranic school exposure, 13 percent have some primary school, 9 percent have completed primary school, 13 percent have some secondary school, 6 percent have completed secondary school, 3 percent have prepared entrance examinations to university level, and 4 percent have been to university.

For males taken as a whole the following proportions are found: 6 percent have Koranic level; 14 percent have primary level; 13 percent have completed primary school; 18 percent have some secondary school level; 10 percent have completed secondary school; 4 percent have prepared for university; and 8 percent have reached university level. For female employees the proportions are higher at the lower levels: 2 percent have gone to Koranic school only; 13 percent have reached primary school; 6 percent have completed primary school; 9 percent have reached secondary school; 3 percent have completed secondary school; 2 percent have prepared for university; and 1 percent have attended university (4 of 7 females having attended university are secretaries, none is a worker).

For workers these proportions are, naturally, somewhat lower: 4 percent have Koranic school, 15 percent have some primary level, 9 percent have completed primary school, 11 percent have some secondary level, 2 percent have completed secondary school, and only 1 percent have gone beyond the secondary level.

Female workers have reached the following levels compared to their male counterparts: 2 percent and 8 percent have had Koranic school; 14 percent and 18 percent have reached the primary level; 5 percent and 16 percent have completed primary school; 8 percent and 16 percent have reached the secondary level; 1 percent and 3 percent have completed secondary school. No female worker has gone beyond secondary school, while 4 male workers have done so.

TABLE 12

LEVEL OF EDUCATION ATTAINED BY POSITION BY SEX
(N = 845)

Level of Education	Plant Manager		Floor Manager		Secretary		Supervisor		Foreman		Worker		Other		Total		General Total
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
Koranic school	-	-	-	-	-	-	1	-	4	-	16	10	2	-	23	10	33 (4%)
Incomplete Primary School	-	-	1	-	-	-	2	-	1	-	37	58	9	2	50	60	110 (13%)
Completed Primary School	-	-	4	-	-	-	-	-	1	1	33	23	10	3	48	27	75 (9%)
Incomplete Secondary School	1	-	6	-	1	7	3	1	3	-	34	36	18	1	66	45	111 (13%)
Completed Secondary School	-	-	8	-	1	11	5	-	1	-	7	3	14	2	36	16	52 (6%)
CEP	-	2	2	1	1	2	1	-	-	-	3	-	8	3	15	8	23 (3%)
University	4	-	11	2	1	4	4	-	1	-	1	-	9	1	31	7	38 (4%)
No level	1	-	1	1	-	-	2	4	5	2	79	298	8	2	96	307	403 (48%)
Total	6	2	33	4	4	24	18	5	16	3	210	428	78	14	365	480	845 (100%)

Level of Education of Male and Female Permanent and Seasonal Employees

Table 13 breaks out total male and female employees by permanent and seasonal status (excluding 11 contractors of unclear status). 32 percent of all permanent employees and 58 percent of all seasonals have not been to school at all. 21 percent of all male permanents and 49 percent of their female counterparts have not attended any level of school.

On the other hand, 33 percent of male seasonals and 69 percent of female seasonals have had no schooling. Only 10 percent of female seasonal employees have reached the secondary level or higher compared to 22 percent of male seasonals, 30 percent of female permanents, and 56 percent of male permanent employees.

TABLE 13

LEVEL OF EDUCATION ATTAINED BY MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES (N = 834)

Level of Education	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Koranic School	12	3	11	7	23	10	33 (4%)
Incomplete Primary School	19	17	31	43	50	60	110 (13%)
Completed Primary School	16	8	31	19	47	27	74 (9%)
Incomplete Secondary School	39	14	27	30	66	44	110 (13%)
Completed Secondary School	31	13	5	3	36	16	52 (6%)
CEP	12	7	2	1	14	8	22 (3%)
University	29	7	1	-	30	7	37 (4%)
No Level	42	67	54	233	96	300	396 (47%)
Total	200	136	162	336	362	472	834 (100%)

IMPORTANCE OF WORKER INCOME AND ATTITUDES TOWARD THE WORK

Share of Worker's Salary in Total Family Revenue

Focusing on the large worker population among respondents, Table 14 presents the role of income earned in the present position in total family revenue. According to respondents, a worker's income on average is equal to 79 percent of total family revenue. This figure rises to 88 percent for permanent workers and falls slightly to 76 percent for seasonals. Part of the lower figure for seasonals is due to the part-time nature of the work, but it is likely that seasonal family income is considerably lower generally than that of permanents.

The worker's salary as proportion of total family revenue differs significantly between the packing and processing industries. Permanent workers in packing earn about 78 percent of total family income, about the average for all workers (79 percent), but considerably less than the average for permanents overall (88 percent). On the other hand, permanent workers in the processing industry earn 92 percent of total family revenue.

Seasonal workers, on the other hand, contribute less to family revenue in both industries than do permanents. Seasonal workers contribute 75 percent of total revenue in the packing industry compared to 78 percent in processing.

TABLE 14

MEAN PROPORTION OF WORKER'S SALARY IN TOTAL FAMILY REVENUE FOR PERMANENT AND SEASONAL WORKERS BY INDUSTRY
(N = 631)

Industry and Employee Type	Mean Percentage of Salary in Family Income	No. of Cases
All Workers	79	631 (100%)
All Permanent Workers	88	162
All Seasonal Workers	76	469
Packing Industry		
Permanent Workers	78	44 (7%)
Seasonal Workers	75	328 (52%)
Processing Industry		
Permanent Workers	92	118 (19%)
Seasonal Workers	78	141 (22%)

Sufficiency of Worker Income for Family Food Needs

Table 15 presents the results of an inquiry into workers' sense of meeting basic food security needs with their present salary. Overall, 52 percent of all workers responded in the affirmative. 59

percent of permanent workers and 50 percent of seasonals felt they were covering basic food needs through their salary.

56 percent of male workers and 50 percent of their female colleagues were of the opinion that food needs were covered by their salary alone. 65 percent of male permanent workers and 56 percent of female permanent workers were of the same opinion. 52 percent of male seasonal workers and 49 percent of their female counterparts felt that food needs were being covered adequately by their salary.

These responses are fairly similar across type of employment and by gender. As usual, there is some bias toward permanent workers and toward males. The high figure for male permanents underscores these trends.

TABLE 15

WORKER SENSE OF COVERING BASIC FOOD NEEDS WITH SALARY
(N = 626)

Can Cover Basic Food Needs with Salary	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	44	50	74	160	118	210	328 (52%)
No	24	40	67	167	91	207	298 (48%)
Total	68	90	141	327	209	417	626 (100%)

Worker Attitude Toward Their Sons and Daughters C[illegible]uing in the Same Work

The question regarding whether workers would like to see their children do the same type of work as they yields some interesting patterns. Table 16 presents the results of the question regarding the sons, while Table 17 indicates the results concerning daughters.

Overall, only 10 percent of workers responded that they would like to see their sons follow in their footsteps. This figure was even less for daughters — 7 percent. 9 percent of males wanted their sons to follow them, while only 3 percent saw this work as fit for their daughters. 10 percent of female workers thought the work was suitable for their sons, while 9 percent thought their daughters should do the same.

Permanent workers were negative in their appraisal of the suitability of their work for their offspring. 12 percent overall thought that their sons should take up the same work, while 10 percent thought the work suitable for their daughters. 9 percent of seasonal workers thought the work suitable for their daughter sons, while 6 percent felt their daughters should not follow in their footsteps.

9 percent of male permanents felt their sons to be better off doing the same type of work, while only 1 percent of the same group wanted their daughters in the same occupation. 15 percent of female permanents saw the work as suitable for their sons, while 16 percent saw it as suitable for their daughters.

9 percent of male seasonal workers thought their sons should follow them into their occupation, while 4 percent felt that their daughters should do so. 9 percent of female seasonal workers felt their sons should follow them into the same work, while 7 percent felt the work suitable for their daughters.

TABLE 16

DESIRE BY WORKERS TO SEE THEIR SONS DO THE SAME TYPE OF WORK
(N = 614)

Would Like to See Sons Do Same Work	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	6	13	13	29	19	42	61 (10%)
No	63	74	128	288	191	362	553 (90%)
Total	69	87	141	317	210	404	614 (100%)

TABLE 17

DESIRE BY WORKERS TO SEE THEIR DAUGHTERS DO THE SAME TYPE OF WORK
(N = 609)

Would Like to See Daughters Do Same Work	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	1	14	5	22	6	36	42 (7%)
No	68	73	136	290	204	363	567 (93%)
Total	69	87	141	312	210	399	609 (100%)

Acceptability of Worker's Job to Relatives and Neighbors

Table 18 presents the results of a question on the acceptability of the worker's occupation to the social entourage — friends, family, and neighbors. Overall, 79 percent of respondents replied in the affirmative, with only 21 percent responding that their work was not approved of by their entourage. 85 percent of all permanent workers and 77 percent of all seasonals felt their occupation was socially acceptable. 77 percent of all male workers and 80 percent of females felt their work to be acceptable.

77 percent of male permanent workers and 90 percent of female permanents claimed that their work was approved of socially. 77 percent of both male and female seasonal workers were of the same positive opinion. The rather high figure for female permanents seems to underscore the value of securing a permanent position for female workers, most of whom are seasonal in status.

TABLE 18

ACCEPTABILITY BY SOCIAL ENTOURAGE OF WORKER'S OCCUPATION
(N = 595)

Acceptance of Occupation	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	51	80	104	236	155	316	471 (79%)
No	15	9	31	69	46	78	124 (21%)
Total	66	89	135	305	201	394	595 (100%)

Job Acceptability to Male and Female Seasonal Workers

The question regarding seasonal worker satisfaction with their jobs reveals some ambivalence toward the occupation. Overall, only 58 percent of workers indicated they were satisfied with their job; 42 percent replied in the negative. Male seasonals were somewhat less satisfied with their seasonal status than females: 53 percent of males and 60 percent of females responded in the affirmative to the question on satisfaction with seasonal employment.

TABLE 19

SATISFACTION WITH SEASONAL WORK BY MALE AND FEMALE SEASONAL WORKERS
(N = 459)

Satisfied with Seasonal Work	Male Seasonals	Female Seasonals	Total Workers
Yes	74	192	266 (58%)
No	65	128	193 (42%)
Total	139	320	459 (100%)

CHAPTER THREE

EMPLOYMENT PATTERNS

SENIORITY OF PERMANENT AND SEASONAL EMPLOYEES BY POSITION IN HORTICULTURAL PACKING AND PROCESSING FIRMS

Table 20 presents the length of service — seniority — of employees by position in horticultural packing and processing. Overall, seasonal employees in the packing industry had the greatest seniority — 43 months of service — implying that on average they had returned to the same job for the preceding 6 to 7 years (cf. Table 28). Permanent employees in the processing industry were the next most senior group according to the survey with 35 months of service. Seasonal employees in the processing industry follow in order of seniority with about 20 months of length of service, trailed by permanent employees in the packing industry with but 13 months of seniority.

Much of the high figure for seasonal employees in the packing industry is due to the group of workers, with 54 months of service. There is, in fact, little difference by gender among workers. Seasonal workers in the packing industry, moreover, have considerably more seniority than their counterparts in seasonal processing — 21 months — and in permanent processing — 28 months. Workers in permanent packing jobs with 7 months seniority have by far the least seniority of all workers, more than 4 times less than in permanent processing and more than 8 times less than in seasonal packing, although seniority in the latter is not of continuous duration, but denotes return each year for about the last 7 years on average.

For workers, there is little difference in seniority by gender in seasonal work, but in permanent processing males have 32 percent more seniority than females. In permanent packing males have over twice the seniority of females — 11 months to 5.

TABLE 20

SENIORITY OF EMPLOYEES BY POSITION IN HORTICULTURAL PACKING AND PROCESSING (N=846)*

Position	Packing/Storage		Processing	
	Permanent	Seasonal	Permanent	Seasonal
Plant Manager	30.0	6.0	78.0	-
Floor Manager	74.6	1.9	38.3	3.2
Secretary	14.1	-	65.1	2.1
Supervisor	9.4	5.2	55.8	2.6
Foreman	27.2	36.6	56.2	49.4
Worker	6.6	54.3	27.5	21.4
Male	10.7	54.2	32.9	21.7
Female	4.6	54.3	25.0	21.2
Other	23.5	8.8	65.3	18.1
All Employees	12.6	43.0	35.3	19.5

* in months

Seniority of Male and Female Permanent and Seasonal Workers in the Horticultural Sector

Complementing Table 20 is a view of the total experience in the horticultural sector of all workers grouped without distinction by industry type as presented in Table 21. There is clearly a distinction in seniority between permanent workers with 10.6 years of seniority and seasonal workers with just over 8. Male permanents have the longest experience in their occupation with nearly 11 years experience, while female permanents have only 10.5. Male seasonal workers have 8.6 years of total experience while female seasonals have 8.

TABLE 21

MEAN EXPERIENCE OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N = 631)

Employee Type	Mean Seniority In Years	No. of Cases
All Permanent Workers	10.6	162 (26%)
Male Permanents	10.8	69
Female Permanents	10.5	93
All Seasonal Workers	8.1	469 (74%)
Male Seasonals	8.6	141
Female Seasonals	8.0	328

Total Agribusiness Employment Experience of Male and Female Permanent and Seasonal Workers in Packing and Processing Firms

Permanent workers report an average of 10.6 years of total employment experience in agribusiness, while seasonal workers report 2 1/2 years less — 8.1 years. Most of this is in the same industry as that in which they are currently employed: permanent workers in the packing industry have 6.4 years experience, while those in processing have nearly twice as much — 12.1 years total experience.

Male permanents in the packing industry have nearly twice as much total experience in agribusiness as do females — 8.3 years for males to 4.5 years for females. On the other hand, male permanents in processing have slightly less total experience than their female counterparts: 11.9 years for males to 12.3 for females.

Male seasonals in packing have about 13 percent more total experience in agribusiness on average than do their female colleagues — 9.4 years for males to 8.3 years for females. On the other hand, as among permanent employees in the processing industry, there is virtually no difference in experience between male and female seasonals — 7.0 and 7.1 years, respectively.

TABLE 22

MEAN TOTAL EXPERIENCE IN HORTICULTURAL SECTOR OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS BY INDUSTRY TYPE
(N = 631)

Industry and Employee Types	Mean Experience in Agribusiness (Years)	Total Cases
All Permanent Workers	10.6	162 (26%)
Packing Industry		
All Permanent Workers	6.4	44
Male Permanents	8.3	22
Female Permanents	4.5	22
Processing Industry		
All Permanent Workers	12.1	118
Male Permanents	11.9	47
Female Permanents	12.3	71
Other Horticulture		
All Permanent Workers	0.2	162
Male Permanents	0.4	69
Female Permanents	0.0	93
All Seasonal Workers	8.1	469 (74%)
Packing Industry		
All Seasonal Workers	8.6	328
Male Seasonals	9.4	95
Female Seasonals	8.3	233
Processing Industry		
All Seasonal Workers	7.1	141
Male Seasonals	7.0	46
Female Seasonals	7.1	95
Other Horticulture		
All Seasonal Workers	0.3	469
Male Seasonals	0.8	141
Female Seasonals	0.1	328

Other Employment Held by Type by Male and Female Seasonal Workers in the Previous 12 Months

Table 23 presents the most important other occupation held by type of position by seasonal workers over the 12 months preceding the survey. Male seasonal workers declare having held somewhat different kinds of occupations over the preceding 12 months than did females. Not all respondents, moreover, replied to this question: 89 percent of males and 85 percent responded to the inquiry. Eighteen percent of males and 44 percent of females were unemployed while they were not working at their present position in post-harvest horticulture. Eighteen percent of males and 10 percent of females relied on agricultural employment while they were not in their present occupation. Fourteen percent of women worked in domestic service while 15 percent of men were in "business" activities during the off season. Nine percent of women worked for another horticultural firm and 6 percent worked in another food industry.

TABLE 23

PRINCIPAL POSITION BY TYPE OCCUPIED BY SEASONAL WORKERS DURING OFF-SEASON OVER PRECEDING YEAR
(N=402)

Type of Other Occupation	No. of Seasonal Workers	
	Males	Females
Another Horticultural Firm	7	25
Another Food Industry	6	18
Non-food Industry	5	6
Business	19	9
Domestic Service	5	39
Agriculture	23	28
Unemployed	36	122
Other Horticultural Firm + Other Food Industry	3	5
Other occupations	21	25
Total	125 (31%)	277 (69%)

Method of Recruitment of Male and Female Permanent and Seasonal Employees

If 46 percent of all employees actually went to the doors of the firm to seek their present position, another 54 percent obtained their job through a variety of other means as indicated in Table 24. By order of frequency we see that employees obtained their position in the following ways: 17 percent of employees obtained it through friends inside the firm; 13 percent through another family member; 9 percent were recruited by intermediaries; 7 percent reported being hired back each year; 2 percent were picked from a waiting list; 1 percent were recruited in their home region or at a particular site; and 5 percent reported having used other means to be hired.

Examining the most frequent method of recruitment — going directly to the firm — by gender and permanent and seasonal status, the following becomes apparent. Thirty-three percent of all males and 56 percent of females got their jobs by going directly to the firm. Thirty-eight percent of permanent employees and 51 percent of seasonals obtained their position in such a way. Twenty-seven percent of male permanents and 52 percent of female permanents went directly to the doors of the firm to seek work, while 39 percent of male seasonals and 57 percent of their female seasonal colleagues did so. The pattern of going to the firm to ask for employment is clearly skewed toward seasonal employees and females.

The next most frequent method of recruitment — recommendation by someone from inside the firm — is reported by 19 percent of all males and 15 percent of females and by 16 percent of all permanent employees and 18 percent of all seasonals. Nineteen percent of permanent males and 12 percent of permanent females claim to have employed this method of entry, while 19 percent of seasonal males and 17 percent of seasonal females used the same means. The proportions of the various groups using this means to gain entry to their present occupation do not vary significantly.

The third most frequent method of recruitment — recommendation by a family member or relative — is reported by 16 percent of all males and 10 percent of females and by 13 percent of all permanent employees and 12 percent of all seasonals. Fourteen percent of permanent males and 13 percent of permanent females claim to have employed this method of entry, while 18 percent of seasonal males and 9 percent of seasonal females used the same means. The proportions of the various groups using this means to gain entry to their present occupation tend to be fairly similar, except in the case of seasonal employees, where males seem to favor this method over females.

The fourth most frequent method of recruitment — recruitment by an intermediary — is reported by 12 percent of all males and 8 percent of females and by 13 percent of all permanent employees and 7 percent of all seasonals. Thirteen percent of permanent males and 12 percent of permanent females claim to have employed this method of entry, while 9 percent of seasonal males and 6 percent of seasonal females used the same means. The proportions of the various groups using this means to gain entry to their present occupation tend to be fairly similar and clearly less important than the other major means of recruitment.

The fifth usual method of recruitment — rehiring each year by the same firm — is reported by 5 percent of all males and 8 percent of females and by 3 percent of all permanent employees and 9 percent of all seasonals. Two percent of permanent males and 3 percent of permanent females claim to have employed this method of entry, while 9 percent of seasonal males and 9 percent of seasonal females used the same means. Understandably, seasonal workers rely on this recruitment method considerably more than do permanent workers, who, nevertheless, report such usage in a small proportion.

TABLE 24

METHOD OF RECRUITMENT FOR MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES
(N=792)

Method of Recruitment	Permanent Employees		Seasonal Employees		Total		Grand Total
	M	F	M	F	M	F	
Hired Each Year	4	4	14	31	18	35	53 (7%)
Selected from Waiting List	8	4	6	1	14	5	19 (2%)
Recommended from Inside Firm	33	15	31	56	64	71	135 (17%)
Recruited at Particular Site	3	1	1	3	4	4	8 (1%)
Went to Firm	46	66	63	192	109	258	367 (46%)
Recommended by Family Member	24	16	28	31	52	47	99 (13%)
Hired by an Intermediary	23	15	15	20	38	35	73 (9%)
Other	29	5	2	2	31	7	38 (5%)
Total	170	126	160	336	330	462	792 (100%)

Method of Recruitment for Male and Female Permanent and Seasonal Workers

Table 25 permits a closer look at the method of recruitment of workers. Of the methods of recruitment used: 54 percent of all workers went to the doors of the firm to seek employment; 17 percent were recommended from inside the firm; 11 percent were recommended by family members or relatives; 8 percent were hired by intermediaries; 7 percent of all workers claim to be hired back each year by the same firm; and about 1 percent were hired through each of the other options (including a category of other means).

Male and female workers showed the following patterns with regard to the four most important means of recruitment: 42 percent of males and 60 percent of females went directly to the firm to seek work; 20 percent of males and 16 percent of their female colleagues were recommended from inside the firm; 14 percent of males and 9 percent of females were recommended by family members; 10 percent of males and 6 percent of females were recruited by intermediaries; and 5 percent of males and 8 percent of females report being hired back each year by the firm.

With regard to permanent and seasonal status the following proportions are found: 58 percent of permanent and 53 percent of seasonal employees went to the firm for employment; 16 percent of permanent and 17 percent of seasonals were recommended from inside the firm; 9 percent of permanents and 11 percent of seasonals were recommended by a family member; 9 percent of permanents and 7 percent of seasonals were hired by an intermediary; and 2 percent (all female) of permanents and 9 percent of seasonals report rehiring each year.

A greater proportion of female permanents and seasonals than their male counterparts went directly to the firm to seek employment: 68 percent of female permanents and 44 percent of male permanents and 58 percent of female seasonals and 40 percent of male seasonals. The trend here appears to indicate that females resort disproportionately to applying directly at the factory gate for employment, while males appear to use contacts and intermediaries more than do females.

With regard to the use of contacts inside the firm, 16 percent of female seasonal workers and 20 percent of male seasonals and 14 percent of female permanents and 19 percent of males used this method of recruitment. Males appear to use friends and other contacts within the firm to gain entry more than do females.

Regarding the use of family contacts to gain entry to the firm, 9 percent of female seasonal workers and 16 percent of male seasonals and 8 percent of female permanents and 10 percent of males used this method of recruitment. Male seasonal workers may employ family contacts more effectively than do their female counterparts.

Concerning the use of intermediaries to gain entry to the firm, 6 percent of female seasonal workers and 10 percent of male seasonals and 8 percent of female permanents and 12 percent of males used this method of recruitment. There is a tendency here for males to prefer this method over their female counterparts.

Finally, analysis of the tendency to being hired back each year reveals that 9 percent of female seasonal workers and 8 percent of male seasonals and 3 percent of female permanents, but no males, used this method of recruitment.

TABLE 25

METHOD OF RECRUITMENT FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS
(N=631)

Method of Recruitment	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Hired Each Year	-	3	11	30	11	33	44 (7%)
Selected from Waiting List	4	-	4	-	8	-	8 (1%)
Recommended from Inside Firm	13	13	28	53	41	66	107 (17%)
Recruited at Particular Site	1	-	1	3	2	3	5 (1%)
Went to Firm	31	63	57	191	88	254	342 (54%)
Recommended by Family Member	7	7	23	30	30	37	67 (11%)
Hired by an Intermediary	8	7	14	19	22	26	48 (8%)
Hired After Interviewing	3	-	2	-	5	-	5 (1%)
Other	2	-	1	2	3	2	5 (1%)
Total	69	93	141	328	210	421	631 (100%)

Average Number of Hours Worked Daily by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms

Respondents were asked the number of hours they worked each day on average. These estimations were averaged for all employees and are presented in Table 26 below. Only the high-level managers reported working more than 8-9 hours per day.

Employees on average worked about 8.6 hours per day. Permanent employees reported a slightly higher number of hours per day than did seasonals: 8.7 to 8.5 hours, respectively. Permanent employees in packing reported a higher number of hours than did those in processing: 9.0 hours for permanents in packing and 8.6 for those in processing. On the other hand, seasonal employees in packing report fewer daily hours than their counterparts in the processing industry — 8.4 hours in packing to 8.8 hours in processing.

Male permanent and seasonal employees declare longer daily hours than do their female counterparts. Thus, male permanent employees report an average of 9.0 hours compared to 8.4 for female permanents, while male seasonals declare 8.8 hours compared to 8.4 for female seasonals.

Workers report an average of 8.5 daily hours, males declaring 8.8 hours per day and females 8.4 hours. Worker hours are just about average for all employees in the sample.

TABLE 26

AVERAGE HOURS WORKED DAILY BY EMPLOYEES
(N=836)

Employee Category	Average Daily Hours	Number of Employees
All Employees	8.6	836 (100%)
All Permanent Employees	8.7	332
In Packing/Storage	9.0	99 (12%)
In Processing	8.6	233 (28%)
Males	9.0	198
Females	8.4	134
All Seasonal Employees	8.5	493
In Packing/Storage	8.4	341 (41%)
In Processing	8.8	152 (18%)
Males	8.8	161
Females	8.4	332
Plant Managers	9.4	8
Floor Managers	9.3	34
Secretaries	8.1	26
Supervisors	8.8	23
Foremen	8.8	19
Workers	8.5	633
Male Workers	8.8	209
Female Workers	8.4	424
All Others	8.8	93

Average Number of Days Worked Per Month by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms

Employees on average worked about 25 days per month. Permanent employees reported a slightly higher number of days worked than did seasonals: 26.2 days to 24.3 days, respectively. Permanent employees in packing reported a higher number of days than did those in processing: 27 days for permanents in packing and 25.8 for those in processing. On the other hand, seasonal employees in packing report three, or 11 percent, fewer days worked per month than their counterparts in the processing industry — 23.3 days in packing to 26.3 days in processing.

Male permanent employees and female seasonal employees declare more days worked per month than their counterparts of the other sex. Thus, female permanent employees report an average of 26.3 days worked compared to 26.1 days for male permanents, while male seasonals declare 24.6 days compared to 24.1 for female seasonals.

Workers report an average of 24.7 days worked per month, males declaring 25 days and females 24.6 days. Worker days per month are about equal to the average for all employees in the sample.

TABLE 27

AVERAGE NUMBER OF DAYS WORKED PER MONTH BY EMPLOYEES
(N = 832)

Employee Category	Average Days Per Month	Number of Employees
All Employees	25.0	832 (100%)
All Permanent Employees	26.2	331
In Packing/Storage	27.0	99 (12%)
In Processing	25.8	232 (28%)
Males	26.1	196
Females	26.3	135
All Seasonal Employees	24.3	491
In Packing/Storage	23.3	340 (41%)
In Processing	26.3	151 (18%)
Males	24.6	160
Females	24.1	331
Plant Managers	24.4	8
Floor Managers	26.7	35
Secretaries	26.2	27
Supervisors	26.0	23
Foremen	27.2	18
Workers	24.7	629
Male Workers	25.0	206
Female Workers	24.6	423
All Others	25.7	92

Average Number of Months Worked Per Year by Male and Female Permanent and Seasonal Employees in Packing and Processing Firms

Employees on average worked 8.5 months per year. Permanent employees reported a considerably higher number of months worked than did seasonals: 11.3 months to 6.6 months, respectively. Permanent employees in packing reported a slightly lower number of months than did those in processing: 11.1 months for permanents in packing and 11.3 for those in processing. Seasonal employees in packing also reported fewer total months worked per year than their counterparts in the processing industry — 6.4 months in packing to 7.2 months in processing.

Male and female permanent employees declare an almost equal number of months worked per year, while male seasonals declare marginally more months than their female seasonal counterparts. Thus, male permanent employees report an average of 11.3 months worked per year compared to 11.2 months for female permanents, while male seasonals declare 6.8 months compared to 6.6 for female seasonals.

Workers report an average of 7.8 months worked per year, males declaring 8.2 months and females 7.5 months. Worker months per year are about 9 percent less than the average for all employees. The highest average number of months worked corresponds to the group of permanent employees in processing.

TABLE 28

AVERAGE NUMBER OF MONTHS WORKED PER YEAR BY EMPLOYEES
(N = 835)

Employee Category	Average Months Per Year	Number of Employees
All Employees	8.5	835 (100%)
All Permanent Employees	11.3	331
In Packing/Storage	11.1	101 (12%)
In Processing	11.3	230 (28%)
Males	11.3	196
Females	11.2	135
All Seasonal Employees	6.6	494
In Packing/Storage	6.4	342 (41%)
In Processing	7.2	152 (18%)
Males	6.8	161
Females	6.6	333
Plant Managers	9.9	8
Floor Managers	10.9	35
Secretaries	11.0	27
Supervisors	10.7	23
Foremen	9.6	18
Workers	7.7	632
Male Workers	8.2	207
Female Workers	7.5	425
All Others	10.8	92

CHAPTER FOUR

REMUNERATION

TYPE OF REMUNERATION BY POSITION IN HORTICULTURAL FIRMS

Respondents generally reported that they worked for an hourly wage. Thus, 52 percent of all employees and 63 percent of all workers reported that their salary was based on an hourly wage. 20 percent of all employees and 26 percent of workers declared that they earned a daily wage, while 27 percent of all employees, but a minority of workers — 12 percent — reported a monthly wage. It is obvious from Table 29 that workers tend to be paid hourly and less commonly on a daily basis, while most other employees (75 percent of all others) are paid on a monthly basis.

TABLE 29

TYPE OF REMUNERATION BY POSITION
(N=847)

Type of Remuneration	Plant Manager	Floor Manager	Secretary	Super-visor	Foreman	Worker	Other	Total
Hourly Wage	1	2	-	5	8	401	27	444 (52%)
Daily Wage	-	-	-	2	1	163	7	173 (20%)
Monthly Wage	7	35	28	16	10	75	59	230 (27%)
Total	8	37	28	23	19	639	93	847 (100%)

TYPE OF REMUNERATION FOR PERMANENT AND SEASONAL EMPLOYEES IN HORTICULTURAL FIRMS

Remuneration type for permanent and seasonal employees and all workers is indicated in Table 30. Thirty-three percent of permanent employees and 65 percent of seasonal employees are paid by the hour, while 51 percent of permanent workers and 67 percent of seasonal workers are paid in similar manner.

Ten percent of all permanent employees and 28 percent of seasonals are paid on a daily basis, while 18 percent of permanent workers and 29 percent of seasonal workers are paid the daily wage.

Finally, 57 percent of all permanent employees but only 7 percent of seasonals are paid a monthly wage, while for workers these figures are 31 percent for permanent workers and 5 percent for seasonal workers.

TABLE 30

TYPE OF REMUNERATION FOR PERMANENT AND SEASONAL EMPLOYEES
(N=836)
AND FOR PERMANENT AND SEASONAL WORKERS (N=626)

Type of Remuneration	All Permanent Employees	Seasonal Employees	Total Employees	Permanent Workers	Seasonal Workers	Total Workers
Hourly	112	324	436 (52%)	83	310	393 (63%)
Daily	33	140	173 (21%)	29	133	162 (26%)
Monthly	192	35	227 (27%)	50	21	71 (11%)
Total	337	499	836 (100%)	162	464	626 (100%)

Average Monthly Salaries by Position and by Type for Employees in Horticultural Firms

The average monthly salaries for all major functional positions by which respondents were classified in the survey are indicated in Table 31 below.[3] There is a clear downward progression in monthly salary from plant manager (firm director) at 7,230 DH ($803) to floor manager at 4,765 DH ($529) to supervisor at 3,070 DH ($341) to foreman at 2,390 ($266) to worker with 1,555 DH ($173). Secretaries' salaries average between those for foremen and supervisors at 2,665 DH ($296).

The breakout for workers' salaries by type are also given in this table. Workers paid on an hourly basis — 63 percent of the total — earn an average of 6.3 DH per hour ($0.70 cents), those paid a daily wage (26 percent of workers) earn an average of 36.9 DH per day ($4.10), and those paid a monthly wage (12 percent of the total) earn an average of 1,555 DH ($173)

[3] The exchange rate used in this volume is 9 dirhams to 1 U.S. dollar, although it varied constantly around this figure during the course of data collection and analysis.

TABLE 31

AVERAGE MONTHLY SALARIES FOR ALL POSITIONS AND AVERAGES BY SALARY TYPE FOR EMPLOYEES (N = 788)

Employee Type	Mean Salaries*	Number of Employees
Plant Manager	7,230	7 (1%)
Floor Manager	4,765	34 (4%)
Secretary	2,665	28 (4%)
Supervisor	3,070	16 (2%)
Foreman	2,390	10 (1%)
Worker		
Hourly	6.3	398 (51%)
Daily	36.9	163 (21%)
Monthly	1,355.0	73 (9%)
Other Employees	3,485	59 (7%)
Total		788 (100%)

* Unless indicated otherwise, all salaries are monthly averages and are rounded to nearest 5 dirhams.

Current Salary by Type for Permanent and Seasonal Workers

Salaries for permanent and seasonal workers are presented in Table 32. Among permanent workers paid by the hour (51 percent of permanents), there is an average hourly wage of 6.7 DH ($0.74), just slightly higher than the average for all workers (cf. Table 31). Permanent workers paid a daily wage (18 percent of the total) earn an average of 42.1 DH ($4.68), about 14 percent higher than the overall daily wage for workers). Permanent workers paid a monthly wage (31 percent of total) earn slightly below (- 3 percent) the overall average at 1,510 DH per month ($168).

Seasonal workers earn lower hourly and daily wages than permanent workers, but distinctly higher monthly wages. It is not clear why this last salary should be so high, but it may reflect dangerous work or the ability to earn some supplementary pay for extra hours. Sixty-seven percent of seasonal workers are paid by the hour, 29 percent are paid on a daily basis, and only 5 percent are paid a monthly wage.

Seasonal workers earn 6.2 DH ($0.69) an hour, 35.8 DH ($3.98) a day, and 1,665 ($185) a month. These salaries are close to the overall averages for all workers, except for the high monthly salary (7 percent above the average for all workers and 10 percent above that for permanent workers paid on a monthly basis).

TABLE 32

MEAN SALARY BY TYPE FOR PERMANENT AND SEASONAL WORKERS
(N=626)

Employee and Remuneration Type	Mean Salary (DH)	No. of Cases
Permanent Workers		162
Hourly Wage	6.7	83 (13%)
Daily Wage	42.1	29 (5%)
Monthly Wage	1,510.0	50 (8%)
Seasonal Workers		464
Hourly Wage	6.2	310 (50%)
Daily Wage	35.8	133 (21%)
Monthly Wage	1,665	21 (3%)

Average Current Salary by Type for Male and Female Employees

In order to compare all worker salaries regardless of mode of remuneration, all hourly wages have been multiplied by 8 and monthly salaries divided by 26 and combined with workers declaring a daily rate to generate the following table (Table 33). This is only an approximate measure, since we have seen that hourly workers work about 8.5 hours per day and that workers claim to work only 24.7 days per month. The margin of error on each side, however, is approximately the same, allowing us to speak to the whole population of workers in terms of a mean daily salary.

All workers, according to this calculation, earn an average daily salary of 48 DH. Permanent workers earn 53 DH per day and seasonal workers slightly over 46 DH. Males as a whole earn 55.3 DH compared to females with 44.3 DH. Male permanents earn 61 DH daily compared to their female counterparts, who earn but 46 DH.

Seasonal workers earn 46 DH per day, considerably less than permanent workers, while male seasonals earn more than female seasonals: 53 DH to 43 DH, respectively.

TABLE 33

MEAN CALCULATED DAILY SALARY OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=626)

Employee Type	Mean Daily Salary (DH)	No. of Cases
All Workers	48.0	626 (100%)
Permanent Workers	53.0	162
Male Permanents	60.7	69 (11%)
Female Permanents	47.4	93 (15%)
Seasonal Workers	46.2	464
Male Seasonals	52.7	140 (22%)
Female Seasonals	43.4	324 (52%)

Average Annual Salary Income of Permanent and Seasonal Employees from All Sources by Position

Annual salaries for employees in post-harvest horticulture primarily reflect present positions, although some additional income from other firms is reported. For those positions respondents occupied during the survey, employees reported an average wage bill of 20,985 DH ($2,332). As expected the average wage for plant managers (directors) was nearly 14 times that of the average permanent worker, or about 29 times that of the average seasonal worker. Thus, firm directors made an annual wage of 254,675 DH ($28,297), the average permanent worker made 18,365 DH ($2,040), and the seasonal worker only 10,530 ($1,170), the latter including an average of 1,830 DH ($203) from other firms. Seasonal workers declared on average the equivalent of an additional 34 days of work outside their present firm at the average daily wage of 53.6 DH. This is equivalent to about 5 1/2 weeks of work.

Annual salaries for floor managers (65,700 DH = $7,300) are about 1/4 of those of firm directors, and supervisors (33,900 DH = $3,767) and secretaries (33,315 DH = $3,702) about half of that of floor managers. The foreman (22,235 DH = $2,471) has on average an annual salary about 2/3 that of supervisors and secretaries, or about 1/3 that of floor managers.

TABLE 34

MEAN ANNUAL SALARY INCOME OF PERMANENT AND SEASONAL EMPLOYEES FROM ALL SOURCES BY POSITION (N=833/842)

Revenue Source and Employee Category	Mean Salary (DH)	Number of Employees
PRESENT FIRM		
All Employees	20,985	833
Plant Manager	223,950	8
Permanent	254,675	7
Seasonal	8,890	1
Floor Manager	65,700	34
Permanent	68,695	32
Seasonal	26,000	2
Secretary	33,315	27
Permanent	34,480	26
Seasonal	3,000	1
Supervisor	33,900	23
Permanent	41,610	17
Seasonal	12,055	6
Foreman	22,235	19
Permanent	27,480	13
Seasonal	10,875	6
Worker	11,195	620
Permanent	18,365	160
Seasonal	8,700	460
Other Position	46,070	92
Permanent	51,885	77
Seasonal	16,805	14
FROM OTHER FIRMS *		
All Employees	1,420	842
Plant Manager	23,400	8
Permanent	25,715	7
Seasonal	7,200	1
Floor Manager	2,330	34
Permanent	1,215	32
Seasonal	22,500	2
Secretary	-	28
Supervisor	155	23
Permanent	-	17
Seasonal	600	6
Foreman	945	19
Permanent	-	13
Seasonal	3,000	6
Worker	1,360	627
Permanent	-	162
Seasonal	1,830	465
Other	425	92
Permanent	345	78
Seasonal	900	14

* Includes 11 employees under contract in various positions. All other averages exclude these contractors.

Average Annual Salary Income from All Sources for Male and Female Permanent and Seasonal Employees

Examining annual salaries of all employees by employment status and by gender we find, not unsurprisingly, considerable disparity between permanent and seasonal workers, but also between males and females of the same employment type. While overall employees averaged 20,985 DH (cf. Table 34), or about $2,332, permanent employees averaged 38,780 DH ($4,309) compared to 1/4 that salary for seasonals — 9,055 DH ($1,006). Obviously, this disparity is due to the fact that the high-paying positions are all permanent and the salaries of the plant managers are enormous compared to those of the others (cf. Table 34).

On the other hand, we find considerable gender difference not only in the category of permanent employees, but even among seasonals and workers, where we would not normally expect to see much difference. Among permanents males earn an average of 49,915 DH ($5,546) and females less than half that figure — an average of 22,535 DH ($2,504).

Among seasonals males earn an average of 11,470 DH plus 3,000 DH from other firms, or a total annual salary of 14,470 DH ($1,608). Female seasonals, on the other hand, earn an average of 7,885 DH in the present position and another 1,360 from other firms during the year, or a total of 9,245 DH ($1,027).

Worker salaries compared by gender are clearly distinct. Males earn on average 14,715 DH per year at the present firm and another 1,905 DH from other firms, yielding a total of 16,620 ($1,847), while females earn 10,460 DH ($1,162), including 1,095 DH from other firms during the year. Even the income source from other firms is nearly twice as high among male workers than among females.

TABLE 35

MEAN ANNUAL SALARY INCOME FROM ALL SOURCES FOR MALE AND FEMALE PERMANENT AND SEASONAL EMPLOYEES
(N = 833/842)

Revenue Source and Employee Category	Mean Salary (DH)	Number of Employees
PRESENT FIRM		
All Employees	20,985	833
Permanent Employees	38,780	332
Males	49,915	197
Females	22,535	135
Seasonal Employees	9,055	490
Males	11,470	160
Females	7,885	330
Workers Only *	11,120	628
Males	14,715	206
Females	9,365	422
OTHER FIRMS		
All Employees	1,420	842
Permanent Employees	730	336
Males	1,230	200
Females	-	-
Seasonal Employees	1,895	495
Males	3,000	161
Females	1,360	334
Workers Only *	1,360	635
Males	1,905	209
Females	1,095	426

* Includes 11 workers on contract (i.e., who are neither permanent nor seasonal. All other averages in this table exclude these contractors, since they are, strictly speaking, neither permanent nor seasonal.

AVERAGE ANNUAL SALARY FROM ALL SOURCES FOR PERMANENT AND SEASONAL WORKERS GLOBALLY AND IN PACKING AND PROCESSING FIRMS

Global View of Worker Annual Salaries

Tables 36 and 37 present a clearer picture of annual income of workers. Annual income of all workers from the present firm is 11,195 DH ($1,244), with an additional 1,360 DH ($151) from other firms during the year. Permanent workers earn an average annual income of 18,365 DH ($2,041), all from the same source, while seasonal workers earn 10,530 DH ($1,170), of which 1,830 DH, or 17 percent, is from other firms during the off-season. Permanent workers thus earn some 74 percent more than their seasonal counterparts.

Male permanent workers earn an average of 22,810 DH ($2,534), while female permanents earn but 15,160 DH ($1,684). Male seasonal workers earned 10,810 DH from the present firm and another 2,845 DH from other sources, yielding a total average annual income of 13,655 DH ($1,517). On the other hand, female seasonals earned an average of 7,785 DH from the present firm and another 1,395 DH from other sources, making a total annual income of 9,180 DH ($1,020).

Male and female seasonal worker supplementary income is quite disparate: male seasonals with 2,845 DH earn well over twice the amount that female seasonals earn outside the present firm (1,395 DH), just as they make about 39 percent more from their principal position than do females. It is not clear why there should be such disparity in principal as well as supplementary income between male and female seasonal workers.

TABLE 36

MEAN ANNUAL INCOME FROM ALL FIRMS OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS
(N = 620/627)

Employee Type	Mean Annual Income (DH)	No. of Cases
Present Firm		
All Workers	11,195	620 (100%)
Permanent Workers	18,365	160
Males	22,810	67 (11%)
Females	15,160	93 (15%)
Seasonal Workers	8,700	460
Males	10,810	139 (22%)
Females	7,785	321 (52%)
From Other Firms		
All Workers	1,360	627 (100%)
Permanent Workers	-	162 (26%)
Seasonal Workers	1,830	465
Males	2,845	140 (22%)
Females	1,395	325 (52%)

Annual Salary by Industry

As seen in Table 37, in the packing industry permanent workers earn somewhat less than the overall average for permanents — 16,685 DH ($1,854) — and they earn somewhat more than this average in processing — 19,685 DH ($2,187). Seasonal workers, on the other hand, earn systematically less than

do their permanent counterparts — 36 percent less than permanents in packing and 45 percent less than permanents in processing. Seasonal workers salaries are remarkably stable between the two industries: seasonals earn an average total salary (all sources) of 10,685 DH ($1,187) in packing and 10,745 DH ($1,194) in processing.

TABLE 37

MEAN ANNUAL INCOME FOR PERMANENT AND SEASONAL WORKERS
BY INDUSTRY TYPE
(N = 625)

Employee Type	Mean Annual Income (DH)	No. of Cases
Packing Industry		
Permanent Workers	16,685	44 (7%)
Seasonal Workers	10,685	322 (52%)
Processing Industry		
Permanent Workers	19,685	118 (19%)
Seasonal Workers	10,745	141 (23%)

CHAPTER FIVE

EMPLOYEE SERVICES AND HEALTH BENEFITS

The Employee Survey focused considerable attention on the nature of employer-provided services and health benefits to workers. Only the workers were selected for attention, because they constitute the target group of the survey.

SALARY ADVANCE AND UNION MEMBERSHIP

Two of the non-health or insurance benefits examined in the survey are extension of credit to workers by employers and union membership. Tables 38 through 40 present the findings.

Access to Employer Credit by Male and Female Permanent and Seasonal Workers

Table 38 indicates that 27 percent of the 631 permanent and seasonal workers claim to have received credit from their employers, while 73 percent have not so benefitted. Some gender difference in access to credit is revealed by the survey: 36 percent of all male workers, but only 23 percent of females, received such credit from their employers.

The survey reveals that permanent workers also benefit somewhat disproportionately from credit compared to their seasonal counterparts. Some 35 percent of permanents, but only 25 percent of seasonal workers, reported receiving credit from their employers. However, nearly twice the proportion of permanent males (49 percent) as permanent females (25 percent) received credit, while the gap is much less among seasonals, where 30 percent of males and 22 percent of females had benefitted from a credit advance.

TABLE 38

ACCESS TO EMPLOYER CREDIT BY MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=631)

Access to Credit	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	34	23	42	73	76	96	172 (27%)
No	35	70	99	255	134	325	459 (73%)
Total	69	93	141	328	210	421	631 (100%)

Average Maximal Credit Advance per Year for Male and Female Permanent and Seasonal Workers

While 27 percent of workers reported receiving credit over the previous year, only 163 workers revealed the amount to enumerators. Table 39 presents the findings of questions on the amount of credit received for each person actually receiving such credit over the previous 12 months. The average amount for all workers was 2,100 dirhams ($233), or 158 percent of one month's salary for the majority of workers (63 percent) who are paid an hourly wage (cf. Table 31).

Permanent workers received nearly twice the credit received by seasonal workers (190 percent more), in large part certainly because they are employed for considerably longer by their employer (169 percent more) during the year (cf. Table 28). The average amount received for permanents was 3,065 DH ($341) and 1,610 DH ($179) for seasonals. However, male permanents received an average amount of 4,260 DH ($473) over the previous 12 months compared to 1,275 DH ($142) for females. In part this reflects the different wage paid to the two sexes (cf. Table 33), but it may also reflect some discrimination in credit extension by gender. This impression is confirmed by the enormous difference in average credit amount received by sex among seasonal workers: male seasonals report 3,080 DH ($342) compared to 780 DH ($87) for female seasonals.

TABLE 39

MEAN MAXIMUM CREDIT ADVANCE PER YEAR FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=163)

Worker Category	Mean Maximum Credit Per Year (DH)	Number of Workers
All Workers	2,100	163 (100%)
Permanent Workers	3,065	55 (34%)
Males	4,260	33
Females	1,275	22
Seasonal Workers	1,610	108 (66%)
Males	3,080	39
Females	780	69

Union Membership of Male and Female Permanent and Seasonal Workers

The Employee survey explored the degree to which workers belonged to a union at their work place. Table 40 presents the results of this inquiry. Only 14 percent of workers responded in the affirmative, while 86 percent claimed not to be members of a union. Over twice the proportion of male workers as females belonged to a union: 21 percent of males, but only 10 percent of all female workers, belonged to a union at their work site.

A distinct difference between permanent and seasonal workers was also revealed by respondents: 22 percent of all permanent workers but only 11 percent of all seasonals claimed union membership in their work place. Gender differences are apparent, however, among both permanent and seasonal workers. Twenty-nine percent of male permanents and 16 percent of female permanents claim union membership, while 17 percent of male seasonals and only 8 percent of female seasonals were union

members. The large female seasonal work force (52 percent of all workers) is thus by far the least organized group of all post-harvest horticultural workers, with only 27 of 326 (8 percent) female seasonal respondents reporting union involvement.

TABLE 40

UNION MEMBERSHIP OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS
(N = 629)

Union Member-ship	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	20	15	24	27	44	42	86 (14%)
No	49	78	117	299	166	377	543 (86%)
Total	69	93	141	326	210	419	629 (100%)

EMPLOYER-PROVIDED INSURANCE AND HEALTH BENEFITS

The Employee survey devoted a considerable number of questions to ascertaining the degree to which workers were offered health and insurance benefits and services by their employers. Generally speaking, only a small minority so benefitted, except for accidental injury insurance, first aid at the work place, and the retirement plan.

Availability of Employer-Provided Health Insurance to Male and Female Permanent and Seasonal Workers

Only 16 percent of all workers reported that their employer provides them with a health (medical) insurance plan, 64 percent were sure that they did not have one, and 20 percent were not sure whether they had one or not. The last group must not have had such a health plan or they would not have been confused by the question.

Nearly twice the proportion of male workers as females had a health plan from their employer: 23 percent of male workers and 12 percent of females had an employer-provided health plan. Permanent workers were also more likely to have such a plan, since 34 percent of permanents but only 9 percent of seasonals were covered by an employer-provided medical plan. Gender differences also appear among both permanent and seasonal workers: 43 percent of male permanents, but only 27 percent of females, and 14 percent of male seasonals, but only 8 percent of their female counterparts, reported such health insurance from employers. Again, the large population of female seasonal workers are largely uncovered (92 percent) by employer-provided health insurance. Only 25 of 326 female seasonal respondents (8 percent) are covered.

TABLE 41

AVAILABILITY OF EMPLOYER-PROVIDED HEALTH INSURANCE TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N = 628)

Employer Provides Health Insurance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	30	25	19	25	49	50	99 (16%)
No	38	51	93	220	131	271	402 (64%)
Don't Know	1	17	28	81	29	98	127 (20%)
Total	69	93	140	326	209	419	628 (100%)

Availability of Employer-Provided Life or Permanent Disability Insurance to Male and Female Permanent and Seasonal Workers

Only a small minority of worker respondents report that their employer provided life or permanent disability insurance. Thus, only 9 percent of respondents claimed to have received such insurance coverage, while 69 percent were sure they did not have such a plan. Twenty-three percent of respondents were not sure whether they had such coverage or not, and it is very likely that few of them did.

Twelve percent of male workers and 7 percent of all females possessed such employer-provided coverage, while 18 percent of all permanent workers, but only 6 percent of seasonals, claimed such insurance. Twenty-four percent of male permanent workers and 13 percent of females had life or disability insurance, while both 6 percent of male and female seasonals possessed such coverage. The major division for this type of employer-provided benefit is clearly between permanent and seasonal workers with gender playing a more important role among permanents.

TABLE 42

AVAILABILITY OF EMPLOYER-PROVIDED LIFE OR PERMANENT DISABILITY INSURANCE TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N = 621)

Employer Provides Life or Disability Insurance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	16	12	8	19	24	31	55 (9%)
No	47	65	97	217	144	282	426 (69%)
Don't Know	3	16	34	87	37	103	140 (23%)
Total	66	93	139	323	205	416	621 (100%)

Availability of Employer-Provided Retirement or Pension Plan to Male and Female Permanent and Seasonal Workers

As Table 43 indicates the number of workers receiving a retirement or pension plan is considerably greater than those claiming health or life/disability insurance. Thus, 36 percent of all worker respondents claimed such a plan, while 44 percent were sure that they lacked this benefit. It is very likely that virtually all workers not sure whether they had such a plan or not (20 percent of total) were without such coverage.

Sixty-four percent of all permanent workers and 26 percent of seasonals claimed to have such a benefit from their employer, while 47 percent of all males and 30 percent of females were sure they had such a plan. Seventy-one percent of male permanent workers and 59 percent of their female counterparts claimed the existence of a plan, while among seasonal workers these proportions were 36 percent for males and 22 percent for females. These figures show bias toward permanent workers and males. The group of female seasonal workers is, once again, least covered by a retirement or pension plan from their employer, falling well below the average for all other workers — 22 percent for female seasonals compared to 51 percent for all others.

TABLE 43

EMPLOYER-PROVIDED RETIREMENT OR PENSION PLAN TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=627)

Employer Provides Retirement Plan	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	48	55	50	72	98	127	225 (36%)
No	19	16	55	186	74	202	276 (44%)
Don't Know	1	22	34	69	35	91	126 (20%)
Total	68	93	139	327	207	420	627 (100%)

Availability of Employer-Provided Accidental Injury Insurance to Male and Female Permanent and Seasonal Workers

Over half — 61 percent — of all workers surveyed report that their employer covers them with insurance for accidental injury, while 20 percent were sure they were not so covered. The proportion of respondents not sure whether they are covered or not (19 percent) cannot be equated with lack of coverage; it is probable that a large proportion of their employers have such a policy, because current legislation so requires.

As should be expected, permanent workers have greater access to this benefit than seasonals: 81 percent of permanent workers but only 55 percent of seasonals have accidental injury coverage. Gender differences are also apparent in the pattern of access to this benefit: 70 percent of all male workers but only 57 percent of females claim such insurance coverage. The pattern is found in both permanent and seasonal workers: 88 percent of male permanents and 75 percent of females have the coverage, while among seasonals the proportions are 61 percent for males and 52 percent for females.

TABLE 44

EMPLOYER-PROVIDED ACCIDENTAL INJURY INSURANCE FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N = 629)

Employer Provides Injury Insurance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	61	70	85	170	146	240	386 (61%)
No	6	13	27	78	33	91	124 (20%)
Don't Know	2	10	28	79	30	89	119 (19%)
Total	69	93	140	327	209	420	629 (100%)

Availability of Employer-Provided Emergency Assistance to Male and Female Permanent and Seasonal Workers

Emergency medical assistance at the work place is apparently generally provided by employers: 64 percent of all workers replied in the affirmative to this question, while 20 percent were sure that such medical assistance was not available and 17 percent did not know. This confirms the conformance of employers with current legislation requiring such emergency medical care.

Permanent workers benefit more than seasonal workers, 76 percent claiming the existence of emergency medical care at the work place. Among seasonal workers, on the other hand, only 60 percent are aware of such a benefit. Sixty-nine percent of all male workers and 61 percent of females report the existence of this benefit from employers, but this varies somewhat by seasonal and permanent status: 77 percent of male permanents and 75 percent of females have such coverage, while only 65 percent of male seasonals and 57 percent of their female colleagues report the existence of emergency assistance. The proportion of female seasonals having such coverage — 57 percent — is significantly lower than the figure for all other workers combined — 71 percent.

TABLE 45

EMPLOYER-PROVIDED EMERGENCY ASSISTANCE TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=629)

Employer Provides Emergency Assistance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	53	70	91	187	144	257	401 (64%)
No	9	12	26	76	35	88	123 (20%)
Don't Know	7	11	23	64	30	75	105 (17%)
Total	69	93	140	327	209	420	629 (100%)

Availability of Employer-Provided Family Planning Services to Male and Female Permanent and Seasonal Workers

Employer-provided family planning services are virtually nonexistent in the post-harvest, horticultural industries examined in this survey. Only 3 persons of 629 respondents — less than 1 percent — reported the existence of such a benefit. One of the respondents was a male permanent worker, the other two were female seasonals.

TABLE 46

EMPLOYER-PROVIDED FAMILY PLANNING SERVICES TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=629)

Employer Provides Family Planning	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	1	-	-	2	1	2	3 (0.5%)
No	68	93	140	325	208	418	626 (99.5%)
Total	69	93	140	327	209	420	629 (100%)

Willingness of Workers to Use Family Planning or Prenatal Services If Available at Work Site

Although virtually no worker claimed to receive family planning services provided by his employer (cf. Table 46), a majority — 70 percent — of those responding to the question (15 percent were not asked or did not respond to this item in the survey) were inclined to use family planning and pre-natal services if the employer should provide them at the work place. Only 30 percent of those responding indicated they would not use such services provided by their employer.

Sixty-three percent of all female workers, but 82 percent of males, were inclined to use family planning services if available at the work place. Eighty-one percent of permanent workers and 67 percent of seasonals were so disposed. Eighty-five percent of male permanent workers and 77 percent of females are favorable to using family planning services at the work place, while 80 percent of male seasonals and only 60 percent of female seasonals are so inclined. Not only do female seasonals seem to have least access to many benefits, but they also seem least likely to use some potential future services. In this case, however, the explanation lies very probably in the high single status of these women, who no doubt feel less able to resort to these services at the work place than their married counterparts (cf. Table 9).

TABLE 47

WORKERS INCLINED TO USE FAMILY PLANNING AND PRENATAL SERVICES IF PROVIDED BY EMPLOYER AT WORK SITE (N = 539)

Would Use Family Planning and Pre-Natal Services	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	52	50	106	169	158	219	377 (70%)
No	9	15	26	112	35	127	162 (30%)
Total	61	65	132	281	193	346	539 (100%)

Availability of Employer-Provided Child Vaccination Services to Male and Female Permanent and Seasonal Workers

Table 48 presents the results of responses to the question of whether employers provide child vaccination services to workers. No worker responded in the affirmative.

TABLE 48

EMPLOYER-PROVIDED CHILD VACCINATION SERVICES TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=629)

Employer Provides Vaccin-ations	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	-	-	-	-	-	-	-
No	69	93	140	327	209	420	629 (100%)
Total	69	93	140	327	209	420	629 (100%)

Availability of Employer-Provided Vaccination Services to Male and Female Permanent and Seasonal Workers

Workers, while reporting no provision by employers of child vaccination services, did report some level of employee vaccination benefit: 17 percent of all workers claimed their employer provided such a benefit, while 83 percent claimed this was not provided. Seventeen percent of both permanent and seasonal workers reported such a benefit. Gender differences were relatively minor: 13 percent of male permanents and 19 percent of their female counterparts reported vaccination services, while 12 percent of male seasonals and 18 percent of females claimed the existence of such employer-provided benefits. Overall, 13 percent of all male workers and 19 percent of females report the existence of this benefit.

TABLE 49

EMPLOYER-PROVIDED VACCINATION SERVICES TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=627)

Employer Provides Worker Vaccina-tions	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	9	18	17	60	26	78	104 (17%)
No	60	75	121	267	181	342	523 (83%)
Total	69	93	138	327	207	420	627 (100%)

Employer-Provided Medical Examination at Hiring

Although it would seem likely that employees receive some form of medical examination prior to hiring, a small percentage of workers — 11 percent — reported such an examination, while 89 percent were sure they had not received one from their employer. Ten percent of permanent workers and 11 percent of seasonals reported having had such a pre-employment medical examination.

A slightly larger proportion of males than females reported having had the medical examination: 13 percent of males and 10 percent of females claimed to have received such an examination prior to hiring. This pattern is found among both permanent and seasonal workers: 12 percent of male permanents and 9 percent of females claimed this examination, while 13 percent of male seasonals and 10 percent of their female counterparts reported similarly.

TABLE 50

EMPLOYER-PROVIDED MEDICAL EXAMINATION AT HIRING FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=627)

Employer Gives Medical Exam	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	8	8	18	34	26	42	68 (11%)
No	61	85	121	292	182	377	559 (89%)
Total	69	93	139	326	208	419	627 (100%)

Availability of Employer-Provided First Aid Services to Male and Female Permanent and Seasonal Workers

A large majority of worker respondents — 79 percent — report the presence of employer-supplied first aid services at the work place. Taken the other way, according to this survey 21 percent of employees do not have basic first aid services available where they work.

Sixty-eight percent of permanent workers and 82 percent of seasonals report first aid services, probably reflecting the work environment, considerably more dangerous on the production line for seasonals than for permanent workers. Seventy-seven percent of all males and 79 percent of females claimed the existence of such first aid facilities at their work place, which varied little by employment status: 63 percent of male permanents and 72 percent of their female colleagues reported first aid services, while 84 percent of male seasonal workers and 82 percent of female seasonals made the same claim.

TABLE 51

EMPLOYER-PROVIDED FIRST AID SERVICES TO MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=624)

Employer Provides First Aid Services	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	43	66	117	265	160	331	491 (79%)
No	25	26	22	60	47	86	133 (21%)
Total	68	92	139	325	207	417	624 (100%)

Availability of Medical Doctor at Work Place for Male and Female Permanent and Seasonal Workers

The existence of a medical doctor at the work place, reported by 25 percent of all workers (Table 52 below), contrasts with the situation where some 21 percent of workers claim the absence of any first aid facilities (cf. Table 51). Obviously, there is enormous difference between firms in post-harvest horticultural processing and packing.

Fourteen of permanent workers report the presence of a doctor at the work place as do 29 percent of seasonals. Thirty-three of all male workers and 21 percent of females report the existence of a doctor. 26 percent of male and 4 percent of female permanent workers claim the presence of a doctor, while 36 percent of male seasonals and 25 percent of females concur in this report. The rather low figure for female permanents probably reflects the large number of clerical workers in this category, where first aid facilities would not be a consideration, although probably available somewhere in the plant. While approximately the same proportion of male and female seasonals report the presence of first aid services at the work place (84 and 82 percent — cf. Table 51), there is a fairly large spread in Table 52 between male and female seasonals in access on the job to a medical doctor — 36 percent and 25 percent, respectively.

TABLE 52

EMPLOYER-PROVIDED MEDICAL DOCTOR AT WORK PLACE FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=629)

Medical Doctor Available at Work Place	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	18	4	51	83	69	87	156 (25%)
No	51	89	89	244	140	333	473 (75%)
Total	69	93	140	327	209	420	629 (100%)

Reimbursement by Employer of Medical Expenses Outside the Work Place

The question of whether employers reimburse employees' medical expenses outside the work place is probably linked to the question of employer-provided medical insurance (Table 41). Overall, 25 percent of respondents indicated that the employer reimbursed at least some of their outside medical expenses, a percentage higher than those claiming employer health insurance (16 percent — cf. Table 41). However, only 9 percent of workers claimed that the employer reimbursed all outside expenses, a proportion less than those claiming to carry an employer-supplied health insurance plan. Eleven percent of permanents and 9 percent of seasonals claimed full coverage of outside medical expenses by employers, while 25 percent of permanents and 12 percent of seasonals reported partial coverage. Fifteen of all male workers reported full coverage and 22 percent claimed partial reimbursement by employers of outside medical expenses. On the other hand, 6 percent of all females reported full coverage, while 13 percent claimed partial coverage of outside medical bills. There are distinct employment status and gender differences reported by workers in regard to this issue.

Looking at gender differences by status, Table 53 shows that 45 percent of male permanents and 29 percent of female permanents report full or partial coverage of outside medical expenses by their employer. On the other hand, 33 percent of male seasonals but only 16 percent of female seasonals claim such coverage.

TABLE 53

REIMBURSEMENT OF OUTSIDE MEDICAL EXPENSES OF WORKERS BY EMPLOYER (N=605)

Reimbursement of Medical Expenses	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	10	7	21	18	31	25	56 (9%)
Partly	21	20	24	31	45	51	96 (16%)
No	38	65	93	257	131	322	453 (75%)
Total	69	92	138	306	207	398	605 (100%)

Employer-Provided Maternity Leave to Workers

Only 32 percent of worker respondents to the survey question on employer-provided maternity leave answered in the affirmative, while a fairly large number did not answer the question at all (9 percent). Twenty-four percent of respondents claimed that their employer did not extend maternity (or paternity) leave, but some 44 percent were unsure whether this benefit existed or not. It is probably a benefit that, while not formally recognized, may be negotiated under the right circumstances in some firms.

Fifty-five percent of all permanent workers and 24 percent of all seasonals reported that they benefitted from maternity leave from their employers. Fifty-one percent of male workers and 22 percent of all females reported the existence of this benefit. This gender-based difference occurs among permanents and seasonal workers: 74 percent of male permanents and 39 percent of females reported this type of leave, while 39 percent of male seasonals and 18 percent of female seasonals claimed to have this benefit. Maternity or paternity leave is thus largely biased toward permanent workers and toward males, although the latter tendency may reflect the large number of single females, particularly among seasonal workers.

TABLE 54

EMPLOYER-PROVIDED MATERNITY LEAVE FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N=577)

Employer Provides Maternity Leave	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	M	F	M	F	M	F	
Yes	50	29	51	55	101	84	185 (32%)
No	5	2	31	99	36	101	137 (24%)
Don't Know	13	44	50	148	63	192	255 (44%)
Total	68	75	132	302	200	377	577 (100%)

CHAPTER SIX

EMPLOYEE PERFORMANCE AND MOTIVATION

OVERVIEW

The Employee Survey attempted to assess employee performance, or productivity, through a number of indirect or subjective measures. Direct measures of employee output per unit of time were not made in this study, nor were productivity calculations made for various firms in the eight product groups.

The assessment of factors important to employee performance included a number of questions related to absenteeism, work stoppages, training received or desired, and subjective responses by workers and other employees to questions relating to work facilitation, satisfaction, and motivation. This section of the analysis will also normally limit itself to the group of 631 permanent and seasonal workers (excluding a small number of "contractors"), who constitute the bulk (74 percent) of all employees and those for whom the survey questions were primarily designed. Tables 55 through 60 present the findings related to absenteeism and to employee appraisal of the major factors relating to their concept of productivity. Tables 61 through 76 present more detail on employee feelings toward factors which enhance, hinder, and motivate the conduct of their work or shape their attitude toward it.

Absenteeism and Work Stoppages

Average Numbers of Days Male and Female Permanent Workers Missed Work Through Paid Leave

Respondents reported an average paid vacation of 20.1 days among all permanent workers. This figure is rather higher for males (24.6 days) than for females (16.7 days), explainable only in part by the higher level of seniority of male permanent workers — 11.5 years for males and 10.3 years for females (cf. Table 21). Skills levels may also be higher for males, because of those having had previous formal training, 75 percent are men (out of only 4 cases, however). It is not clear whether male workers are taking more leave because they are given more leave or because they feel more secure in taking time off. There may also be some measure of discrimination here.

TABLE 55

MEAN NUMBER OF DAYS MALE AND FEMALE PERMANENT WORKERS MISSED WORK THROUGH PAID LEAVE
(N = 158)

Type of Employee	Mean Number of Days Paid Leave	Number of Cases
All Permanent Workers	20.1	158 (100%)
Male Permanent Workers	24.6	69 (44%)
Female Permanent Workers	16.7	89 (56%)

Average Number of Days Male and Female Permanent Workers Were Out Sick During Previous Year

Table 56 reveals that permanent workers, largely due to the paid sick benefits they receive, tend to be out of work sick nearly twice as much as do seasonal workers. In much greater proportion, seasonal workers must come to work or suffer loss of income or loss of employment. While there appears to be no significant difference between sick leave taken between male and female permanent workers, male seasonal workers appear to be out ill considerably more frequently (64 percent) than their female co-workers, probably because women have fewer other employment options and depend to a greater degree than men on maintaining the security of their current income stream. This hypothesis is reinforced in Table 57, where it is obvious that male seasonal workers spend considerably more time absent from work looking for new employment than do their female seasonal counterparts.

TABLE 56

MEAN NUMBER OF DAYS OUT SICK IN ONE YEAR FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS
(N = 629)

Employee Category	Mean Absence (Days)	No. of Cases
All Permanent and Seasonal Workers	5.7	629 (100%)
Permanent Workers	8.9	162
Males	8.6	69 (11%)
Females	9.1	93 (15%)
Seasonal Workers	4.6	467
Males	6.4	139 (22%)
Females	3.9	328 (52%)

Average Total Absence from Work Excluding Paid Vacation in One Year for Workers

Table 57 presents findings on average total absence from work during the course of the preceding year, excluding paid vacation extended to permanent employees for which seasonal workers do not qualify. The number of total days out for all reasons beyond paid vacation is, nevertheless, still rather high for permanent employees (15.5 days), although no significant difference is revealed between males and females. Interestingly, male permanent employees report nearly 4 days off for maternity/paternity leave, females only 3. This reflects the much higher incidence of singleness, particularly divorce and widowhood, even among permanent employees (71 percent among females, 24 percent among males — cf. Table 9).

While permanent workers appear to be absent in all about 29 percent more than seasonal workers (15.5 days compared to 12), male seasonals are out some 65 percent more than their female counterparts. This difference can be explained by the considerably higher absentee rate for job seeking (males 5.6 days, females 1.8 days). This again reflects the wider range of job choices by male seasonals and the reduced job mobility of their female co-workers.

TABLE 57

TOTAL MEAN ABSENCE FROM WORK EXCLUDING PAID VACATION IN ONE YEAR FOR MALE AND FEMALE PERMANENT AND SEASONAL WORKERS (N = 629)

Employee Category	Mean Absence (Days)	No. of Cases
All Permanent and Seasonal Workers	12.9	629 (100%)
Permanent Workers	15.5	162
Males	14.1	69 (11%)
Females	16.5	93 (15%)
Seasonal Workers	12.0	467
Males	16.7	139 (22%)
Females	10.1	328 (52%)
Maternity Leave		
All Permanent Workers	3.4	162
Males	3.9	69 (11%)
Females	3.0	93 (15%)
Job Seeking		
All Seasonal Workers	2.9	467
Males	5.6	139 (22%)
Females	1.8	328 (52%)

Average Number of Days of Work Stoppage from Machine Breakdown During the Previous Year

Workers do not report a high number of days of work stoppage due to machine breakdown, although such stoppages occur in both packing and processing and may last for variable periods. Seasonal workers report about 1.3 days of work stoppage with little difference between packing and processing, while permanent workers report an average of 1.6 days of stoppage, but with over 5 times more delay in processing than in packing (2.1 days compared to 0.4). Reduction of worker output because of forced idleness from machine downtime appears of little importance in both the packing and processing industries.

TABLE 58

MEAN NUMBER OF DAYS OF WORK STOPPAGE FROM MACHINE BREAKDOWN DURING PREVIOUS YEAR FOR PERMANENT AND SEASONAL WORKERS BY TYPE OF INDUSTRY (N = 629)

Industry and Employee Category	Mean Days of Work Stoppage	Number of Workers
Workers in Both Industries	1.4	629
Packing/Storage Industry		
Permanent Workers	0.4	44
Seasonal Workers	1.2	326
Processing Industry		
Permanent Workers	2.1	118
Seasonal Workers	1.4	141

Self-Measurement of Job Performance by Workers

Responses to a set of choices regarding how workers should measure their own job performance reveal some interesting gender-based differences, with significant disparity also between permanent and seasonal workers. Responses were open-ended in the questionnaire and were subsequently grouped for analysis into 6 types, including "don't know."

Female workers tend to place greater emphasis on the achievement of a satisfactory output measure (59 percent), compared to their male counterparts (41 percent). Twice the proportion of female permanent workers as males value output as a measure of performance, while this ratio shifts to over 3 for seasonals. Both permanent and seasonal employees most value achieving output targets compared to other measures of performance (39 percent of permanents, 57 percent of seasonals). Overall, 52 percent of respondents rated achieving satisfactory output as important. The measure includes an appreciation of both quantity and quality of output per unit of time, respect for product technical specifications, good packaging, and proper labelling.

Professional behavior, which includes seriousness, punctuality, enthusiasm, good relationship with managers, and serious work ethic, was ranked second in importance by workers as a measure of job performance. Both permanent (18 percent) and seasonal workers (12 percent) considered this important. Males, however, valued this measure more highly than females. Some 23 percent of male and 15 percent of female permanent employees and 16 percent of male seasonals and 10 percent of female seasonal workers favored this measure. Overall, 14 percent of all workers considered professional behavior as an important means by which to evaluate the job performance of themselves and their colleagues.

Third in importance according to worker response was efficiency and rapidity of work, which includes serenity, efficiency, rapidity, no delays, no need to be urged on, and lack of problems in accomplishing the work. 9 percent of all permanent and seasonal workers considered this an important criterion for measuring their job performance. Males tended to prefer this option more than females, particularly among permanent workers. Overall, 15 percent of males compared to 11 percent of females, and 11 percent of permanents to 8 percent of seasonals, valued this measure of performance.

Other measures offered by respondents are not numerous. These include freedom from machine breakdowns and client satisfaction. Lack of importance of machine-induced (or other exogenous) work stoppage, which only 2 percent of respondents considered a significant factor in rating job performance, confirms the low number of days of worker idleness due to technical downtime (cf. Table 58).

A rather large number of respondents, particularly female, were not able to provide a means, subjective or objective, by which they might judge their job performance. Overall, 22 percent of all workers claimed ignorance of how to measure performance, 24 percent of females and 19 percent of males. Over 21 percent of female and 19 percent of male seasonal workers were unable to offer a measure, compared to 31 percent of female and 20 percent of male permanents. It is unclear why female permanent workers should have a percentage of uncertainty significantly higher (31 percent higher) than the norm for the other groups (between 19 percent and 21 percent).

TABLE 59

SELF-MEASUREMENT OF JOB PERFORMANCE BY MALE AND FEMALE PERMANENT AND SEASONAL WORKERS
(N = 602)

Method of Measuring Job Performance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Satisfactory Output	20	40	63	193	83	233	316 (52%)
Professional Behavior	15	13	22	32	37	45	82 (14%)
Efficiency and Rapidity of Work	10	6	21	17	31	23	54 (9%)
No Machine Breakdowns	6	-	5	3	11	3	14 (2.5%)
Client Satisfaction	2	-	1	-	3	-	3 (0.5%)
Don't Know	13	27	26	67	39	94	133 (22%)
Total	66	86	138	312	204	398	602 (100%)

Training Courses for Workers

Training Courses Received by Male and Female Permanent and Seasonal Workers and Interest by Workers in Future Formal Training Courses

Increasing worker productivity depends to a large measure on training. The survey shows, however, that very few workers — about 1 percent — have ever received any formal training. Of these few, most were permanent workers (57 percent) and only 29 percent were females.

On the other hand, a sizeable proportion of workers expressed a desire for such training — 22 percent. 29 percent of permanent workers and 19 percent of seasonals would like to have a training course. 41 percent of those expressing an interest in future formal training are women — 32 percent of interested permanents and 46 percent of interested seasonal workers. Only 16 percent of female permanents and 13 percent of female seasonals, however, expressed interest in future training, compared to 46 percent of male permanents and 35 percent of male seasonal workers. There is a clear tendency for permanent and male workers to appreciate the value of formal training compared to seasonal and female workers. Least interested was that important group of female seasonal workers, some 52 percent of all workers in the post-harvest horticultural sector.

TABLE 60

EXPOSURE TO FORMAL TRAINING COURSES IN PAST AND DESIRE FOR FUTURE TRAINING BY WORKERS
(N = 609/619)

Employee Type	Attended Training (N = 609)		Desire Training (N = 629)	
	Yes	No	Yes	No
Permanent Workers				
Males	3	66	32	37
Females	1	91	15	77
Seasonal Workers				
Males	2	135	49	92
Females	1	310	42	285
Total	7 (1%)	602 (99%)	138 (22%)	491 (78%)

Four Most Important Factors in Facilitating the Work of Male and Female Permanent and Seasonal Workers

Introduction

In this section of the questionnaire, respondents were asked to evaluate 10 factors thought to favor or facilitate work performance or comfort. Choices, as can be seen in Tables 41 through 44, were limited to three, plus "don't know." In addition, respondents were asked to rank order the top 3 choices. The 4 factors receiving the greatest frequency of "number 1" ranking by 631 worker respondents are presented in decreasing order of importance in the following 4 tables. The most popular choices received, respectively, the following number of first place rankings: work rhythm (153); safety of equipment used (104); supervisor's instructions (102); and seated work position (96).

Other choices, which are not presented in this report, were: spacing of work tables or lines (84); standing position (82); number of permitted breaks (61); quality of lighting and ventilation (57); quality of work clothing (56); reduction of noise level (26); and others (2).

Worker Perception of the Importance of Work Rhythm or Cadence on the Line

Overall, 61 percent of all workers considered work rhythm to be an important issue, 16 percent somewhat important, 15 percent not important, and 9 percent did not have an opinion. 60 percent of permanent workers and 62 percent of seasonal workers concurred that the issue was important. Male workers (54 percent) seemed to consider work rhythm, or cadence, less important than female workers (64 percent). Among permanent workers females (68 percent) tended to view work rhythm as more important than males (49 percent), while this tendency was significantly reduced amongst seasonals, where 63 percent of females and 57 percent of males felt the issue was important. The tendency for female workers to place greater value on work rhythm is probably related to the less specialized, more routine nature of most of their work.

TABLE 61

WORKER PERCEPTION OF IMPORTANCE OF WORK RHYTHM OR CADENCE ON THE LINE FOR JOB PERFORMANCE
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	34	63	80	207	114	270	384 (61%)
Somewhat Important	13	15	21	49	34	64	98 (16%)
Not Important	10	13	16	54	26	67	93 (15%)
Don't Know	12	2	24	18	36	20	56 (9%)
Total	69	93	141	328	210	421	631 (100%)

Importance of Work Place Safety

A large proportion of all respondents (78 percent) named work place safety as an important issue, only 13 percent as somewhat important, and 7 percent as unimportant. Nevertheless, they ranked this issue first among all factors less frequently than work rhythm. 73 percent of permanent workers and 79 percent of seasonals shared this opinion, while the gap between males and females appears significant: 81 percent of all female workers and 71 percent of males ranked the issue as important. There is little difference by gender among permanent workers (74 percent for males, 72 percent for females). However, among seasonals 83 percent of women, but only 70 percent of men, ranked work place safety as important. As in work cadence, seasonal women place much greater emphasis on work place safety than male seasonals and all permanent workers.

TABLE 62

WORKER PERCEPTION OF IMPORTANCE OF WORK PLACE SAFETY
FOR JOB PERFORMANCE
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	51	67	99	273	150	340	490 (78%)
Somewhat Important	9	14	27	33	36	47	83 (13%)
Not Important	8	12	7	18	15	30	45 (7%)
Don't Know	1	-	8	4	9	4	13 (2%)
Total	69	93	141	328	210	421	631 (100%)

Importance of Supervisors' Instructions

While third in overall ranking as a top priority issue, the importance of supervisors' instructions or orders for facilitating work performance garners 70 percent of all respondents' evaluations, with 18 percent claiming the issue to be at least somewhat important, and 8 percent maintaining it to be of no importance. 65 percent of permanent workers and 71 percent of seasonals consider the issue to be important. 70 percent of male permanents and 61 percent of females concur in this opinion, while there is little difference in opinion between male and female seasonals (72 percent of women and 70 percent of men). Overall, an equal proportion of all female and male workers (70 percent) rate this an important issue. Such equality of opinion between men and women in this survey is rare.

TABLE 63

WORKER PERCEPTION OF IMPORTANCE OF SUPERVISORS' INSTRUCTIONS FOR JOB PERFORMANCE
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	48	57	98	236	146	293	439 (70%)
Somewhat Important	11	27	23	55	34	82	116 (18%)
Not Important	9	8	10	25	19	33	52 (8%)
Don't Know	1	1	10	12	11	13	24 (4%)
Total	69	93	141	328	210	421	631 (100%)

Importance of a Seated Work Position

Fourth in importance as a perceived issue in job facilitation is that of a seated position, although it is considerably less important than the three other work facilitating issues. Only 36 percent of respondents — 42 percent of females and 25 percent of males — ranked the issue as important. However, 28 percent of respondents — 25 percent of females and 33 percent of males — ranked the issue as somewhat important for job performance. Nevertheless, the same proportion of all respondents (28 percent) rated the issue as unimportant (27 percent of women and 29 percent of men).

40 percent of all permanents and 35 percent of seasonals ranked the issue as important. 29 percent of male permanents and 47 percent of female permanents rated the issue important, as did 23 percent of male seasonals and 40 percent of female seasonals. The greater importance attached by women to the seated position is probably a function of the routine, sedentary nature of their work.

TABLE 64

WORKER PERCEPTION OF IMPORTANCE OF A SEATED WORK POSITION FOR JOB PERFORMANCE (N = 630)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	20	44	33	132	53	176	229 (36%)
Somewhat Important	23	27	47	80	70	107	177 (28%)
Not Important	15	19	45	96	60	115	175 (28%)
Don't Know	11	3	16	19	27	22	49 (8%)
Total	69	93	141	327	210	421	630 (100%)

Four Most Important Factors Influencing Worker Satisfaction

Introduction

This section of the employee questionnaire deals with those conditions which procure the greatest amount of work satisfaction. Workers' responses to the 11 choices were affirmative or negative (or "don't know"). Respondents were also asked to rank the 3 most important factors, as in the question on work facilitation.

First in importance in number of top rankings (131) are work hours. This is followed by amount of pay (128), regularity of pay (108), and getting along well with colleagues (98). Less important choices not discussed in this report were: security of employment (80); relations with supervisors (60); knowledge of managerial hierarchy and appropriate orders (54); output expected by day or hour of work (47); regularity of work (47); bonuses for output (34); and work difficulties (26).

Satisfaction of Workers with Work Hours

Work hours, chosen most frequently as the most important satisfaction in the work place, was picked by 75 percent of all workers as satisfactory. 25 percent were not satisfied by their work hours. 75 percent of both permanent and seasonal workers were satisfied with their hours. 79 percent of all male workers and 73 percent of females felt satisfied with their hours. 78 percent of male permanents and 73 percent of female permanents claimed satisfaction in this regard. 79 percent of male seasonals and 73 percent of female seasonals concurred in this choice. Responses to this question show a

remarkable consistency, with females apparently slightly less likely to feel comfortable with their work schedule than males, but with no difference according to permanent or seasonal status.

TABLE 65

SATISFACTION OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS WITH WORK HOURS (N = 631)

Worker Satisfaction	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	54	68	112	238	166	306	472 (75%)
No	14	25	29	89	43	114	157 (24.5%)
Don't Know	1	-	-	1	1	1	2 (0.5%)
Total	69	93	141	328	210	421	631 (100%)

Satisfaction of Workers with Amount of Remuneration

Having indicated amount of pay as the second most important issue among factors procuring work satisfaction, 64 percent of workers declared that they were not satisfied with their salary (35 percent were satisfied). There was, in fact, remarkable consistency among respondent groups. 62 percent of permanent workers and 64 percent of seasonals were unsatisfied, while 65 percent of all male workers and 63 percent of females concurred in this dissatisfaction. 64 percent of male permanents and 60 percent of females were dissatisfied. 65 percent of male seasonals and 64 percent of females were not satisfied with their salary. Table 66 presents these findings.

TABLE 66

SATISFACTION OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS WITH AMOUNT OF REMUNERATION
(N = 631)

Worker Satisfaction	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	25	37	48	113	73	150	223 (35%)
No	44	56	92	210	136	266	402 (64%)
Don't Know			1	5	1	5	6 (1%)
Total	69	93	141	328	210	421	631 (100%)

Satisfaction of Workers with Regularity of Remuneration

In spite of major dissatisfaction with their level of remuneration, workers were largely satisfied with the regularity of remuneration, classified as third most important issue conferring work satisfaction. 84 percent of all respondents were satisfied with the scheduling of their pay, 13 percent were not. 86 percent of permanent workers and 84 percent of seasonals concurred in this satisfaction. 87 percent of all male workers and 83 percent of females were satisfied with the scheduling of their pay. 83 percent of male permanents and 88 percent of females were satisfied, while 89 percent of male seasonals and only 82 percent of females expressed such satisfaction. There is an interesting gender-based reversal of expressed satisfaction between permanent and seasonal workers; male permanents and female seasonals were less satisfied than the other sex in the same occupational status.

TABLE 67

SATISFACTION OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS WITH REGULARITY OF REMUNERATION
(N = 631)

Worker Satisfaction	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	57	82	125	269	182	351	533 (84%)
No	8	8	13	52	21	60	81 (13%)
Don't Know	4	3	3	7	7	10	17 (3%)
Total	69	93	141	328	210	421	631 (100%)

Satisfaction of Workers with Level of Getting Along with Co-Workers

Fourth in order of importance of those factors felt to procure job satisfaction, the level of getting along with co-workers was found satisfactory by 91 percent of all workers. 89 percent of all permanents and 91 percent of seasonals were satisfied. 90 percent of all males and 91 percent of females concurred in this satisfaction. 88 percent of male permanents and 89 percent of females were satisfied. 91 percent of both permanent and seasonal workers expressed satisfaction with the level of pleasant interaction with their colleagues. There is a remarkable consistency in these responses.

TABLE 68

SATISFACTION OF MALE AND FEMALE PERMANENT AND SEASONAL WORKERS WITH LEVEL OF GETTING ALONG WITH CO-WORKERS
(N = 631)

Worker Satisfaction	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Yes	61	83	129	299	190	382	572 (91%)
No	1	8	7	27	8	35	43 (7%)
Don't Know	7	2	5	2	12	4	16 (3%)
Total	69	93	141	328	210	421	631 (100%)

Four Most Important Factors Influencing Worker Motivation

Introduction

This section of the questionnaire focused on factors capable of motivating employees to greater job performance. 17 factors were rated by respondents as important, somewhat important, or not important. Employees also ranked the top three factors by order of importance. As in the sections on work facilitation and satisfaction, the number of top rankings given by respondents to the 17 factors has determined the selection of the factors to be examined in this report. One of these factors — a salary covering more than basic needs — received 88 percent of top rankings (554). The second factor presented here — opportunity for advancement of career and increase in salary — received 115 votes for most important factor in work motivation. The inclusion of the mention of opportunity for salary increase obviously relates this factor to the first.

Two other motivating factors were chosen, but fall well behind the first two in their importance. Insurance coverage offered by employers garnered 42 top rankings, while credit and savings plans offered by the enterprise received 40. Other choices not retained here for analysis are: employer's contribution to retirement plan (33); restaurant in the firm (16); transportation for employees (14); work in a friendly environment (11); separate work areas for men and women (9); preventive safety arrangements for machines (9); medical emergency services on work site (7); non-monetary rewards (6); availability of a store in the firm (5); health services for children (4); day care center for children at the work site (2); family planning services at the work site (1); and availability of maternity leave (0). The last four factors, judged by respondents to be least important in motivating their work, are presented in the next section for analysis.

Importance of a Salary Covering More than Basic Needs

Salary is an issue commanding enormous attention among the respondents. Fully 96 percent of all workers felt that having more than a subsistence salary was an important factor in motivating them to produce. Only 3 percent and 1 percent of respondents felt the issue was only somewhat important or unimportant, respectively. 98 percent of permanent workers and 96 percent of seasonals concurred in the importance of salary for motivation. 97 percent of female workers and 95 percent of their male colleagues gave the issue the same importance. 99 percent of female permanent workers and 96 percent of male permanents, and 96 percent of female seasonals and 94 percent of males shared the same opinion. Their is a considerable degree of uniformity in the value attached to a salary beyond that considered adequate for basic needs.

TABLE 69

IMPORTANCE OF A SALARY COVERING MORE THAN BASIC NEEDS FOR WORKER MOTIVATION
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	66	92	133	316	199	408	607 (96%)
Somewhat Important	-	1	7	8	7	9	16 (3%)
Not Important	2	-	1	2	3	2	5 (1%)
Don't Know	1	-	-	2	1	2	3 (0.5%)
Total	69	93	141	328	210	421	631 (100%)

Importance of the Opportunity to Advance Career and Salary Level

Obviously related in part to the previous question, because it contains reference to advancing the salary level, is the second most highly ranked choice of performance motivating factors. Here again, there is a high degree of consensus regarding the importance of the opportunity to advance one's career and salary level, although falling well short of salary alone. 87 percent of all workers rated this issue important, 5 percent considered it somewhat important, and 6 percent felt it to be unimportant in worker motivation. 93 percent of permanent workers and 85 percent of seasonals rated the issue as important. 90 percent of male workers and 85 percent of females concurred in this opinion. 97 percent of female permanents, but only 87 percent of males, felt the issue to be important, a pattern reversing itself amongst seasonal workers, where 92 percent of male seasonals and 82 percent of females rated the issue of career advancement important as a motivating factor.

These tendencies are related to the nature of permanent work, where a career, as commonly understood, is not only possible but is likely to be more valued by women because of their more limited employment options. On the other hand, the absence of clear career opportunities in seasonal work and the unskilled nature of its largely female work force mean that career or salary advancement from upward mobility in occupational level are not perceived as of the same importance as in permanent work. Salary increase in seasonal work, on the other hand, flows primarily from overtime pay, itself largely a function of seniority in the firm and experience in the industry. It is, consequently, a far more important concept in motivating seasonal workers, and female seasonals in particular, than is the more abstract concept of career and salary advancement.

TABLE 70

IMPORTANCE OF THE OPPORTUNITY TO ADVANCE
CAREER AND SALARY LEVEL AS MOTIVATION FOR WORKERS
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	60	90	130	269	190	359	549 (87%)
Somewhat Important	5	-	5	20	10	20	30 (5%)
Not Important	-	2	3	34	3	36	39 (6%)
Don't Know	4	1	3	5	7	6	13 (2%)
Total	69	93	141	328	210	421	631 (100%)

Importance of Employer-Provided Insurance Coverage

The importance of employer-provided insurance coverage falls far below the previous motivating issues as a top ranked worker issue, although it does marshall a considerable degree of felt importance. 95 percent of all workers feel this issue to be important, only 3 percent considering it somewhat important (1 person felt it unimportant). 95 percent of permanent workers and 96 percent of seasonals, along with 96 percent of females and 95 percent of males, concurred in this opinion. 96 percent of male permanent workers and 95 percent of female permanents, along with 94 percent of male seasonals and 96 percent of their female co-workers, all gave the same high evaluation of the employer's insurance coverage as a factor in motivating employees.

Such a high rating for seasonals and many permanents, however, reflects far more the desire for such coverage rather than a recognition of its current value in motivating employees, since it was seen in the section on employee benefits that only 34 percent of permanent employees and 9 percent of

seasonal workers have employer-provided health insurance, while only 17 percent of permanents and 6 percent of seasonals have life or disability insurance (cf. Tables 41 and 42). On the other hand, it was seen that employers are now providing accidental injury insurance coverage to 81 percent of permanent workers and to 55 percent of seasonals (cf. Table 44).

TABLE 71

IMPORTANCE OF EMPLOYER-PROVIDED INSURANCE AS MOTIVATION FOR WORKERS
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	66	88	133	315	199	403	602 (95%)
Somewhat Important	1	2	8	8	9	10	19 (3%)
Not Important	-	1	-	-	-	1	1 (-)
Don't Know	2	2	-	5	2	7	9 (1%)
Total	69	93	141	328	210	421	631 (100%)

Importance of Employer-Provided Credit and Savings Plan

Fourth in rank order of importance and, as with insurance coverage, considerably less important than salary and career advancement as issues motivating workers, is the factor of employer-provided credit or savings plan. 75 percent of respondents considered this issue to be important, 17 percent felt it to be somewhat important, and 5 percent saw it as unimportant. 85 percent of permanent workers and 71 percent of seasonals concurred in this rating. 76 percent of all female workers and 72 percent of males felt the issue to be important. 77 percent of male permanents, but 90 percent of females, and 70 percent of male seasonals and 72 percent of females were of the opinion that credit and savings plans were important motivating factors.

However, in the section on employee benefits it was seen that access to credit concerned only 27 percent of workers, 35 percent of permanent workers and 25 percent of seasonals (cf. Table 38). The medium importance given this issue in employee motivation reflects the low level of credit extension in post-harvest horticultural firms and a relatively low degree of felt need, except, it appears, on the part of female permanent workers.

TABLE 72

IMPORTANCE OF EMPLOYER-PROVIDED CREDIT AND SAVINGS PLAN IN WORKER MOTIVATION
(N = 631)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	53	84	99	235	152	319	471 (75%)
Somewhat Important	6	6	30	66	36	72	108 (17%)
Not Important	3	-	6	20	9	20	29 (5%)
Don't Know	7	3	6	7	13	10	23 (4%)
Total	69	93	141	328	210	420	631 (100%)

Four Least Important Factors Influencing Worker Motivation

Introduction

The factors which were given the fewest first place rankings were, in order of increasing importance: maternity leave, family planning services at the work place, day care center for children at the work site, and children's health services. None of these choices received more than 4 top rankings; maternity leave was picked by none of the respondents.

Importance of Employer-Provided Maternity Leave

In spite of being picked by no one as of first importance among all issues motivating employees, some 45 percent of all workers still considered this an important issue, 24 percent a somewhat important issue, and 16 percent as unimportant in employee motivation. 15 percent of workers did not have an opinion on this matter, reflecting the relative unimportance of this issue in employment. 47 percent of all permanents and 44 percent of seasonal workers, but 35 percent of all males and 49 percent of all female workers, considered the issue important. 43 percent of male permanent workers and 49 percent of their female co-workers, but 30 percent of male seasonals and 40 percent of females, concurred in this opinion. This issue is understandably more important to women than to men, and to permanent employees than to seasonals, for that is where a considerably higher level of such benefits occur.

In the section on employee benefits, it was seen that 55 percent of permanent employees and 24 percent of seasonals reported that their firm gave maternity leave, although, again, a large proportion

overall — 59 percent — did not know whether they had such a benefit or not (cf. Table 54). This underlines the fact that the issue of employer-provided maternity/paternity leave is far from a burning issue in the motivation of workers, particularly seasonals.

TABLE 73

IMPORTANCE OF MATERNITY LEAVE FOR WORKER MOTIVATION
(N = 630)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	30	46	43	162	73	208	281 (45%)
Somewhat Important	14	12	48	80	62	92	154 (24%)
Not Important	8	19	17	59	25	78	103 (16%)
Don't Know	17	16	33	26	50	42	92 (15%)
Total	69	93	141	327	210	421	630 (100%)

Importance of Employer-Provided Family Planning Services

Considered slightly more important as an issue in employee motivation (one employee picked this as the top issue), employer-provided family planning services at the work place managed to garner 31 percent of workers who declared it an important factor, while 38 percent declared it somewhat important, 19 percent felt it was unimportant, and 12 percent did not have an opinion. 24 percent of permanent workers and 33 percent of seasonals, and 29 percent of all males compared to 32 percent of female workers, felt it was an important issue in employee motivation. 23 percent of male permanents and 25 percent of females, and 32 percent of male seasonals and 34 percent of their female co-workers, concurred in this opinion.

A preference on the part of seasonals for this issue compared to permanents appears here, although it is unclear why, since, as is seen in the section on employee benefits, virtually no worker (3 of 629), male or female, permanent or seasonal, currently receives such benefits from employers (cf. Table 46). This implies that seasonals are more aware of wanting this benefit, probably because of their more precarious financial situation and the large proportion of divorced, widowed, or separated female seasonal workers (cf. Table 9).

TABLE 74

IMPORTANCE OF EMPLOYER-PROVIDED FAMILY PLANNING SERVICES
FOR WORKER MOTIVATION
(N = 629)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	16	23	45	110	61	133	194 (31%)
Somewhat Important	22	35	58	124	80	159	239 (38%)
Not Important	13	19	18	70	31	89	120 (19%)
Don't Know	18	16	20	22	38	38	76 (12%)
Total	69	93	141	326	210	419	629 (100%)

Importance of Child Care Facility at the Work Place

Slightly higher in popularity than maternity leave or family planning services at the work site, but still among those motivational factors rated least important by respondents, is the issue of having access to an employer-provided child care facility at the work site. 33 percent of all workers felt this issue to be important, 35 percent somewhat important, 21 percent felt it unimportant, and 11 percent did not have an opinion. 27 percent of permanent workers and 35 percent of seasonal workers felt the issue to be important, while 28 percent of all males and 35 percent of females concurred in this opinion. 25 percent of male permanent workers and 29 percent of female permanents felt this to be an important motivational factor for employees, while 30 percent of male seasonals and 37 percent of females shared this opinion.

There is understandably a tendency for females to rate this issue higher than males, but male and female seasonals also rate the factor higher than their permanent counterparts. It is understandable that female seasonals should see importance in this issue because of the large proportion of previously married women, while it is likely that male seasonals see the financial advantage, particularly if their wives also work in firms — the same or others — where such benefits are not provided.

TABLE 75

IMPORTANCE OF CHILD CARE FACILITY AT WORK PLACE FOR WORKER MOTIVATION
(N = 630)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	17	27	42	121	59	148	207 (33%)
Somewhat Important	22	27	54	117	76	144	220 (35%)
Not Important	14	26	22	71	36	97	133 (21%)
Don't Know	16	13	23	18	39	31	70 (11%)
Total	69	93	141	327	210	420	630 (100%)

Importance of Child Health Services at the Work Place

Finally, more popular than the other three least important motivational factors, but nonetheless near the bottom of the list of issues considered in the survey (14th of 17), is the factor of employer-provided child health services. 55 percent of all workers declared this an important issue, while 23 percent felt it to be somewhat important, and 11 percent considered it unimportant (11 percent did not know). 52 percent of permanent workers and 56 percent of seasonals, and 58 of males and 53 percent of their female colleagues shared this rating. 65 percent of male permanents and 43 percent of females, along with 55 percent of male seasonals and 56 percent of females, concurred in this opinion. The pronounced disparity between male and female permanents stands out and is not readily understandable. That this must be largely a hypothetical future service can be seen in the section on employee benefits, where no worker reports employer-provided child vaccination services (cf. Table 48), 75 percent indicate the absence of a doctor at the work site (Table 52), 83 percent indicate the lack of adult vaccination services on site (Table 49), and 89 percent receive no medical examination on being hired (Table 50).

TABLE 76

IMPORTANCE OF CHILD HEALTH SERVICES AT THE WORK PLACE
FOR WORKER MOTIVATION
(N = 630)

Perceived Importance	Permanent Workers		Seasonal Workers		Total Workers		Grand Total
	Male	Female	Male	Female	Male	Female	
Important	45	40	77	183	122	223	345 (55%)
Somewhat Important	4	22	38	79	42	101	143 (23%)
Not Important	3	15	10	44	13	59	72 (11%)
Don't Know	17	16	16	21	33	37	70 (11%)
Total	69	93	141	327	210	420	630 (100%)

CHAPTER SEVEN

SUMMARY OF FINDINGS AND CONCLUSIONS

SOCIO-DEMOGRAPHIC PROFILE OF EMPLOYEES

Major Employee Groups and Their Distribution

Unskilled workers constitute the vast majority of permanent and seasonal employees in the packing and processing industries of the Moroccan post-harvest horticultural sub-sector. For this reason they were chosen as the focus of the employee survey.

Over 75 percent of the 847 respondents to the employee survey questionnaire call themselves workers (ouvriers). Seasonal workers compose 73 percent of this group, permanent workers are 25 percent, and the remainder claim to be neither permanent nor seasonal.

Women are a slimmer majority of employees, constituting 57 percent of all respondents to the employee questionnaire. They are, however, fully two-thirds (67 percent) of all workers. Among seasonal workers women constitute 70 percent of the total, but only 57 percent among permanent workers, about equal to their share of all employees.

The seasonal, unskilled work force is thus overwhelmingly female. Only among the 28 secretaries of the sample do women constitute a higher proportion of any employee category (86 percent). In contrast to this, women compose only 16 percent of the 87 managerial and supervisorial personnel surveyed.

The eight commodity groups of the 58 firms surveyed can be grouped into two industries — packing and processing. The packing industry (conditionnement) comprises those firms handling citrus, early season fruits and vegetables (primeurs), flowers, or serving as cold storage facilities. Processing firms (conserveries) are those engaged in transforming or preserving fruits and vegetables, olives and olive oil, spices and condiments, and wine grapes. Survey respondents are fairly evenly divided between the two industries: 53 percent from packing and 47 percent from processing.

The packing and processing industries contain substantially different proportions of permanent and seasonal employees, but little difference in share of males and females. While 23 percent of employees in packing are permanent and 77 percent seasonal, in the processing industry 61 percent are permanent and 39 percent seasonal. Females are 59 percent of all employees in the packing industry and 54 percent in processing.

The proportion of workers among all employees varies significantly between the two industries and largely explains the variation in permanent-seasonal employment status. Th , 82 percent of employees in the packing industry are workers, while the figure falls to 67 percent in processing firms.

Proportions of male and female workers also varies by industry, primarily among permanent workers. In the packing industry 27 percent of permanent workers and 69 percent of seasonals are female, while in processing these figures are 46 percent and 65 percent, respectively. Overall, females compose 69 percent of all workers in the packing industry and 65 percent in processing.

The age distribution of employees varies somewhat between the packing and processing industries. Packing firms tend to employ a larger proportion of younger employees than do those in processing. Thus, 47 percent of all employees are 30 years old or less in packing, while this group is only 33 percent in processing. Of those nine employees found to be under 16, none are permanent personnel and eight of nine (89 percent) are in the packing industry. The youngest of this group is 12. Regarding older employees, those 46 years old and above, processing has 25 percent of its work force in this range, while packing firms count only 18 percent of their employees in this bracket.

Permanent employees tend to be more grouped in the middle age range than seasonal employees, among whom there are more younger and more older personnel. Thus, 75 percent of permanent employees in packing and 83 percent in processing are between the ages of 21 and 45, while among seasonals these figures are 68 percent and 72 percent, respectively.

However, considerable difference exists among permanents between the two industries: 15 percent of permanent employees in packing are older than 45 and 9 percent younger than 21, while among processing permanents these figures are 27 percent and 1 percent, respectively.

These differences are much less pronounced between industries for seasonal employees. Thus, 18 percent of seasonal employees in packing are over 45 and 14 percent less than 21, while for seasonals in processing these figures are 22 percent and 6 percent, respectively.

Mobility and Migration Patterns

Employees demonstrate both a high level of migration from their birthplace and considerable residential stability over the medium to long term. Thus, fully 96 percent of all respondents are not native to the province in which they now reside and work. There is little difference by sex and seasonality of employment: 5 percent of males, 3 percent of females, 6 percent of seasonals, but 1 percent of permanents still reside in their province of birth. Female seasonals are slightly more likely to leave their birth province than male seasonals, while both male and female permanents are more likely to out-migrate than seasonals.

On the other hand, post-harvest horticultural employees exhibit relative residential stability. Over the preceding 10 years, 87 percent of all employees report but one residence, and 10 percent claim two or three. There is virtually no difference in this figure by sex, although permanent employees appear somewhat more stable than seasonals. Female permanent employees are most stable of all groups with 96 percent of their number claiming but one residence over the past decade. On the other hand, 99 percent of this same group are no longer living in their province of birth.

Female seasonal employees are least stable residentially, with 84 percent claiming but one place of residence over the previous 10 years. Male seasonals and permanents do not differ significantly from this number with 88 percent and 87 percent, respectively.

Only 18 percent of all employees, moreover, had changed their residence to take their current job, while 82 percent had not. There is virtually no difference in this figure between permanent and seasonal employees, and little difference between male and female seasonals. On the other hand, there is considerable difference in mobility by sex among permanent employees: 23 percent of males but only 8 percent of females have changed their residence to accept the current job.

Overall, males evidence a greater tendency to relocate to accept employment than females: 22 percent of males and 15 percent of females reported this move. However, it is the category of male permanent employees which accounts for most of this difference.

Marital Status and Children

A majority of permanent and seasonal employees (58 percent) in post-harvest horticulture are single: 35 percent are bachelors, 11 percent are divorced, 10 percent widowed, and 1 percent are married but separated. There are strong sex-linked differences, however. Two-thirds (67 percent) of all male employees are married and living with their spouses, while only 23 percent of females are in this status.

Looked at another way, fully 77 percent of all female employees are single: 40 percent have not been married, 19 percent are divorced, 18 percent are widowed, and about 1 percent are married but separated. Female seasonal employees exhibit the highest degree of singleness (79 percent) of all employee groups, followed by female permanents (71 percent), male seasonals (44 percent), and male permanent employees (23 percent). The marital status of male permanent employees is thus diametrically opposed to that of female seasonals.

Female seasonals are more likely to be divorced, widowed, or separated than female permanents: 40 percent of female seasonals compared to 29 percent of female permanents are single through broken marriage. However, the difference between female seasonal and permanent employees who are still bachelors is minimal: 39 percent and 42 percent, respectively, have not yet married.

Only slightly more than one-tenth (11 percent) of all employees in post-harvest horticulture have not yet married by age 31. By age 41, however, this proportion has been reduced to 2 percent. On the other hand, divorce begins relatively early: 27 percent of all divorced employees are 30 years old or less.

Widowed employees are normally common to the older age groups. Thus, 51 percent of widows and widowers are older than 45 years. Surprisingly, there is a remarkable number of younger widows and widowers: 31 percent of all widowed employees are 40 years old or less. The vast majority (74 percent) of widowed employees, however, are found between the ages of 36 and 60.

Excluding all persons never married, employees report having 2.9 children on average (standard deviation = 2.5). This figure is not a measure of mean total births for this population but a count of living children for those previously or presently married. Averages for permanent and seasonal employees overall do not depart from this average, but male permanents have 3.3 children compared to 2.0 for female permanents. Male seasonals have 3.3 children compared to 2.8 for female seasonals.

While workers taken as a separate population have approximately the same number of children on average (3.0) as the total for all employees, the disparity between the number for males and females is second only to that between the sexes among all permanent employees: 3.4 for males to 2.7 for females.

Level of Education

The proportion of employees who have never attended any form of school is 48 percent. This proportion rises to 59 percent for the worker group: 38 percent for male workers and 70 percent for females.

Among all employees 4 percent have been to Koranic school, 13 percent have some primary school, 9 percent have completed primary school, 13 percent have some secondary school experience, 6 percent have completed secondary school, 3 percent have prepared for the university, and 4 percent have attended university.

Among all permanent employees 32 percent have never been to school, while among seasonals the figure is nearly twice as high — 58 percent. By sex the gap is even greater: 21 percent of male permanents and 49 percent of their female counterparts have never been to school. On the other hand, 33 percent of male seasonal employees and 69 percent of female seasonals have never reached any level of education.

For the worker population 4 percent have only Koranic school, 15 percent have some primary school, 9 percent have completed primary school, 11 percent have some secondary school, and 2 percent have completed the secondary level. Only 1 percent of workers have gone beyond the secondary level.

Female workers have the lowest levels of education of all groups: 2 percent have only Koranic school, 14 percent have attended some primary school, 5 percent have completed primary school, 8 percent have reached the secondary level, and 1 percent have completed the secondary level. No female worker has gone beyond secondary school, although 4 male workers have done so. Seven of 10 female workers have never put their foot in a school of any type.

Worker Attitudes

Worker orientation toward their job are examined from two points of view: the importance of the income earned and its sufficiency in meeting basic food needs; and whether mothers and fathers wish to see their daughters and sons follow in the same type of occupation the parents have chosen for themselves.

On average a worker's income in post-harvest horticulture is equal to 79 percent of total family revenue. This figure rises to 88 percent for permanent workers and falls to 76 percent for seasonals.

A worker's salary as share of total family revenue does not differ markedly from the average in both the packing and processing industries of post-harvest horticulture, except for permanent workers in the processing industry. This group of workers in processing cover some 92 percent of their total family revenue, while their counterparts in packing contribute but 78 percent. Seasonals in both industries contribute a lesser proportion of total family income: 78 percent in processing and 75 percent in the packing industry.

While it is obvious that more than one worker income is involved in generating total family income, more serious is the fact that 48 percent of all workers claim that their salary does not even meet basic food needs for their families. Seasonal workers felt themselves less able to meet such needs than permanent workers: 50 percent of seasonal workers and 41 percent of permanents claim to be unable to meet subsistence needs with their salary alone.

Male workers and female workers did not differ markedly according to their estimation of sufficiency of salary for subsistence: 50 percent of females and 44 percent did not consider their salary adequate. Female seasonal workers were the least satisfied group of workers with the adequacy of their revenue, over half (51 percent) feeling it to be inadequate to nutritional needs, while male permanents were the most satisfied, with 65 percent claiming their pay was sufficient to meet food needs.

Serious worker dissatisfaction with their occupational status can also be seen through worker attitude toward the desirability of their offspring taking up the same employment as their parents. Overall, few workers were favorable to the idea: 10 percent and 7 percent of all workers, respectively, felt their sons and daughters should follow them into post-harvest packing and processing firms.

Male permanent workers were particularly negative in their attitude toward their work: only 9 percent wanted their sons to follow them, 1 percent their daughters. On the other hand, female permanents were the most favorable group toward their work, 15 percent recommending it to their sons, 16 percent to their daughters. Both male and female seasonal workers were largely of the same opinion as male permanent workers, although they tended to be more favorable to their daughters in this work (4 to 7 percent, respectively, compared to 1 percent).

In view of the lack of desire to promote their occupation to their offspring, do the workers feel that their job is socially acceptable to their family, relatives, and neighbors? Overall 79 percent of workers responded in the affirmative, with 85 percent of permanent workers and 77 percent of seasonals concurring in this opinion. The difference by sex was slight: 77 percent of all male workers and 80 percent of females claimed their work to be acceptable to their entourage. Female permanents were most confident of social approval (90 percent), while only 77 percent of male permanents and male and female seasonals were of the same opinion. The rather high figure for female permanents underscores the value of securing a permanent position. This is particularly true for female workers for whom most opportunities are seasonal.

Seasonal workers, when asked directly about their job satisfaction, tend to be ambivalent: 58 percent claim to be satisfied, 42 percent dissatisfied with their job. Male seasonals are somewhat less satisfied than their female colleagues, 53 percent claiming satisfaction with seasonal employment compared to 60 percent for females.

EMPLOYMENT PATTERNS

Seniority and Experience of Employees

Seniority of employees in their present position differs between the packing and processing industries. Seasonal employees in packing have been longest in their present firm with 43 months average service. This means that they have returned each year on average for the preceding six to seven years

Permanent employees in the processing industry were the next most senior group with an average of nearly three years (35 months) of service.

Seasonal employees in processing follow in seniority with about 20 months of activity in their present post, or an average of nearly three years repeat service.

Finally, permanent employees in the packing industry declare the least seniority in their present firm with only 13 months in their post. Why seasonal employees in packing should have the longest involvement with their firms, while permanent employees in the same industry have the least seniority of all four groups is unclear.

Seasonal workers in the packing industry have an average of 54 months of service with little difference by gender. Seasonals in processing, on the other hand, have only 21 months average seniority in their posts.

Permanent workers in the packing industry have the least seniority of all workers with 7 months experience in their present firm. This figure is four times less than that for permanent workers in processing (28 months).

While there is little difference in seniority by sex in seasonal work, among permanent workers males tend to have significantly more experience in their present positions: male permanent workers in processing have 32 percent more experience than females (33 months to 25), while in the packing industry they have over twice the seniority of their female counterparts — 11 months to 5.

Total experience in the horticultural sector for permanent and seasonal workers includes seniority with the present firm and previous experience of similar nature in related firms. Overall, there is clearly a distinction in average sector experience between permanent workers (11 years) and seasonal workers (8 years). Male permanents have the longest experience in horticulture with 11 years of service, while female permanents have slightly less with 10 1/2. Male seasonal workers have about 8 1/2 years of total experience in horticulture, while female seasonals have exactly 8.

Permanent workers report an average of 10.6 years of total employment experience in agribusiness, while seasonal workers report exactly 2 1/2 years less. Most of this is in the same industry as that in which they are currently employed: permanent workers in the packing industry have about 6 1/2 years experience, while those in processing have nearly twice as much — just over 12 years total experience.

Male permanents in the packing industry have nearly twice as much total experience in agribusiness as do females — just over 8 years for males to 4 1/2 years for females. On the other hand, male permanents in processing have roughly the same total experience as their female counterparts — about 12 years.

Male seasonals in packing have about 13 percent more total experience in agribusiness on average than do their female colleagues — about 9 1/2 years for males to 8 1/3 years for females. On the other hand, as among permanent employees in the processing industry, there is virtually no difference in experience between male and female seasonals — about 7 years.

In addition to their principal employment in post-harvest horticulture, to which many return every year, seasonal workers tend to have another major activity in the off-season. Over one-third (39 percent) of all workers are, however, unemployed during this period. The proportion of females unemployed is nearly 2 1/2 times greater than for males, reaching nearly half of all female seasonals (44 percent).

Other occupations during the off-season are agricultural production, domestic service, petty commerce, and other horticultural or agricultural firms. Nearly one-fifth of male seasonal workers (18 percent), but only one-tenth (10 percent) of females, worked in agricultural production, while about equal proportions of female and male seasonals (15 percent) worked in the gender-specific roles of domestic service or petty commerce, respectively.

Nearly half of all employees (46 percent) obtained their position by presenting themselves at the doors of the factory. The remainder obtained their job through a variety of other means, including: from friends inside the firm (17 percent), influence of family members (13 percent), recruitment by intermediaries (9 percent), automatic hire-back each year (7 percent), and 8 percent through other means, including recruitment in the home region (1 percent only).

Going directly to the doors of the firm is the preferred method of recruitment of one-third (33 percent) of all male employees and over half (56 percent) of all females. Seasonal employees, not surprisingly, are considerably more likely to prefer this method of hiring, while female permanent employees are nearly twice as likely to be hired in this manner as their male counterparts. Female seasonals are also considerably more likely (56 percent more) to seek employment in this way compared to male seasonals.

Recommendation for employment from friends within the firm is the method of recruitment for about one-fifth of male employees (19 percent) and a somewhat lower proportion of women (15 percent). Proportions of permanent and seasonal employees are very similar, and this balance holds for seasonal employees by sex. Male permanent employees, however, are somewhat more likely than female permanents to employ this method.

Employment secured through family influence is used somewhat more by male (16 percent) than female employees (10 percent), while proportions of permanent and seasonal employees are balanced. It is the male seasonals (18 percent) who account for this tendency, with about twice the percentage of male seasonals as females using this method.

Recruitment by an intermediary is primarily a male and permanent employee phenomenon. Half again as many males (12 percent) as female employees use intermediaries to secure their employment, while nearly twice as many permanent employees (13 percent) as seasonals do so.

Workers as a population were somewhat more likely to seek employment at the doors of the enterprise than employees as a whole. Thus, 54 percent of all workers use this method of recruitment. Workers use other means in essentially the same proportions as do all employees taken together.

A considerably greater proportion (60 percent) of female workers as males (42 percent) seek employment at the doors of the prospective firm. This disparity is similar numerically but reversed for the other common means of recruitment: recommendation from within the firm, family member influence, and use of intermediaries. Disparity between permanent and seasonal workers is slim across all common types of recruitment.

About half again as many female permanent and female seasonal workers as their male counterparts seek employment directly at the firm. Male workers, on the other hand, tend to resort substantially more frequently to contacts, relatives, and intermediaries.

Employees on average work 8.6 hours per day, workers slightly less (8.5). Only high-level managers apparently work more than 9 hours a day. Permanent employees work only very slightly more each day than seasonals. Permanents in packing work slightly more each day than those in processing, while seasonals in processing claim longer days than their counterparts in the packing industry. Male permanent and male seasonal employees declare longer daily hours than do their female colleagues, as do male workers compared to females. The largest of these differences, that between male and female permanents, is but 7 percent. None of the other differences surpasses 5 percent.

Employees on average work 25 days per month. Permanent employees apparently work almost two days more than do seasonals (8 percent more). Permanent employees in packing work about one day more than those in processing, while among seasonals those in processing work three days (13 percent) more than their counterparts in packing.

Male permanent employees and female seasonal employees declare more days worked than their colleagues of the other sex in the same work status. Male workers claim slightly more days worked per month than females, and their overall average is about the same as for all employees. None of the sex differences among permanent or seasonal employees or male and female workers surpasses 2 percent.

Employees overall on average work 8.5 months per year. Permanent employees, not unsurprisingly, claim substantially more months worked than seasonals: 11.3 months for permanents and 6.6 for seasonals. Permanent employees in processing apparently work marginally more each year than permanents in packing. The same claim is made by seasonals in the two industries: seasonals in processing work about 13 percent more time than their counterparts in the packing industry.

Male and female permanent employees declare an almost equal number of months worked each year, while male seasonals declare marginally more months than their female seasonal colleagues. Workers overall report an average of 7.8 months worked per year with males declaring about 9 percent more time than females. Workers on average claim about 8 percent less time worked per year than the average for all employees.

Remuneration

A majority of employees (52 percent) and nearly two-thirds of all workers (62 percent) work for an hourly wage. One-fifth (20 percent) of all employees (26 percent of workers) earn a daily wage, while 27 percent of employees but only 12 percent of workers report payment based on a monthly wage. Although two-thirds of workers are paid an hourly wage, three-quarters (75 percent) of all other employees are paid a monthly salary.

The type of remuneration depends to a large degree on the type of employment status. One-third (33 percent) of permanent employees and two-thirds (65 percent) of seasonals are paid an hourly wage. Since seasonal workers constitute an overwhelming proportion of all seasonal employees (94 percent), their mode of remuneration dictates the figure for seasonal employees. Thus, 67 percent of all seasonal workers report an hourly wage.

On the other hand, permanent workers are only about three-quarters (74 percent) of all permanent employees, with permanent workers reporting a considerably greater frequency of hourly remuneration (51 percent) than the overall figure for permanents (33 percent).

Few permanent employees (10 percent) and only 28 percent of all seasonal employees (29 percent of workers) are paid on a daily basis. While seasonal employees and especially seasonal workers are more likely to be paid an hourly or daily rate than their permanent colleagues, this tendency is reversed among employees paid on a monthly basis. Thus, well over half (57 percent) of permanent employees and nearly one-third of permanent workers (31 percent) are paid on a monthly basis, compared to 7 percent of all seasonal employees and 5 percent of seasonal workers.

Average monthly salaries for the major positions descend regularly from somewhat over $800 (7,230 DH) for plant managers (directors) to floor managers (4,765 DH) to supervisors (3,070 DH) to foremen (2,390 DH) to workers at about $173 (1,555 DH). Average salaries for secretaries is between

those for foremen and supervisors (2,665 DH). These are average salaries only for those indicating monthly remuneration. Only 12 percent of workers, for example, earn a fixed monthly salary.

About two-thirds of all workers (permanents, seasonals, a few specialized contractors) — 63 percent — earn an average hourly wage of 6.3 DH (about $0.70). Since they work an average of 8.5 hours a day and 24.7 days per month their average monthly wage must be about 1,325 DH ($147). This is slightly below (15 percent) the wage listed by the 12 percent of workers paid a fixed monthly salary, who very likely benefit from some degree of specialization.

Workers paid a fixed daily wage (26 percent of the total) earn an average of 36.9 DH ($4.10) per day. This is considerably lower (31 percent) than the average daily wage (53.6 DH) of workers earning by the hour. The group of fixed daily wage earners among workers must consist primarily of permanent workers paid for monthly duties largely independent of the flow of produce through the firms.

Salaries summarized by permanent and seasonal status indicate that seasonal workers earn lower hourly and daily wages on average than permanent workers, but somewhat higher monthly wages, although this last group is extremely small (5 percent of all seasonals). Seasonal workers earn on average slightly less per hour (7 percent) and per day (15 percent) than their permanent counterparts, but about 10 percent more per monthly wage.

By employing a formula to convert all salary types to a common daily wage for purposes of comparison, it can be seen that on balance workers earn an average daily wage of about 48 DH ($5.33). Permanent workers earn about 15 percent more than seasonals and males overall some 25 percent more than their female colleagues. Within both groups of permanent and seasonal workers males earn more on average than females: male permanents earn 28 percent more than females, while male seasonals earn 21 percent more than their female counterparts. Female permanents with 43.4 DH ($4.82) per day earn 40 percent less than male permanents, the most highly paid category of workers.

Total annual salary income for employees in post-harvest horticulture primarily reflect their current positions, although some additional income from other firms is also reported. Current positions represent an average annual wage bill of 20,985 DH ($2,332). The average annual salary income for plant directors is nearly 14 times that of the average permanent worker and about 29 times that of the average seasonal worker.

The average permanent worker makes 18,365 ($2,041) per year, while the seasonal worker, largely due to the substantially shorter work season, makes only 10,530 DH ($1,170), including an average of 1,830 DH ($203) from other firms during the year. Seasonal workers declare on average the equivalent of an additional 34 days of work outside their present firm, calculated at the average daily income of 53.6 DH. This is equivalent to about 5 to 6 weeks of additional salaried work during the year from other firms.

Employees taken as a whole, exhibit substantial differences in average annual salary income by employment status and gender. Although all employees average some 20,985 DH ($2,332), permanent employees average 38,781 DH ($4,309), well over 400 percent the salary of seasonal employees (9,055 DH) in their principal position (10,950 DH from all firms). Obviously, this results from the overwhelmingly worker component (94 percent) of seasonal employment and the extremely high salaries of top managers.

There are significant gender-linked disparities, not only within the category of permanent employees with its highly paid, largely male (87 percent) plant directors and floor managers, but also among seasonal employees and workers. Male permanent employees earn well over twice the salary of

female permanent employees, while male seasonals earn 45 percent more from the principal position and 56 percent more income from all firms together during the year.

Annual income of all workers from the present firm is 11,195 DH ($1,244) and 1,360 DH ($151) from other firms during the year. Permanent workers earned an average annual income of 18,365 DH ($2,041), all from the same source, while seasonal workers earned 10,530 DH ($1,170), of which 1,830 DH, or 17 percent, was from other firms during the off-season.

Male permanent workers earned an average of 22,810 DH ($2,534), while female permanents earned but 15,160 ($1,684). Male seasonal workers earned 10,810 DH from the present firm and another 2,845 DH from other sources, yielding a total average annual income of 13,655 DH ($1,517). On the other hand, female seasonals earned an average of 7,785 DH from the present firm and another 1,395 DH from other sources, making a total annual income of 9,180 DH ($1,020).

Male and female seasonal worker supplementary income is quite disparate: male seasonals with 2,845 DH earn well over twice the amount that female seasonals earn outside the present firm (1,395 DH), just as they make about 39 percent more from their principal position than do females. It is not clear why there should be just disparity in principal as well as supplementary income between male and female seasonal workers.

Total salaries by workers from all sources is 12,555 DH ($1,395), with permanent workers earning about 74 percent more than seasonals, having an average of 18,365 DH ($2,041) compared to seasonals with 10,530 DH ($1,189). In the packing industry permanent workers earn somewhat less than the overall average for permanents — 16,685 DH ($1,854) — and they earn somewhat more than the average in processing — 19,685 DH ($2,187).

Seasonal workers, on the other hand, earn systematically less than do their permanent counterparts — 36 percent less than permanents in packing and 45 percent less than permanents in processing. Seasonal workers salaries are remarkably stable between the two industries: seasonals earn an average total salary (all sources) of 10,685 DH ($1,187) in packing and 10,745 DH ($1,194) in processing.

EMPLOYEE SERVICES AND HEALTH BENEFITS

Salary Advance and Union Membership

Only a small minority of workers (27 percent) receive credit from their employers over the course of one year. Permanent workers and males benefit disproportionately from this facility. The gender disparity in access to credit from employers is, however, considerably greater among permanent workers than among seasonals.

The average amount of credit received by these workers over the course of one year is 2,100 DH ($234), or about 158 percent of one month's average salary. Permanent workers receive nearly twice the amount as seasonals, in part due to their considerably longer period of employment each year. Among permanent workers, however, males receive over three times the amount received by female permanents. Among seasonal workers, males receive nearly four times the sum granted by employers to females. In part this disparity reflects the higher average wage received by male workers, but it also reveals serious preference in credit advance toward males.

Only a very small minority (14 percent) of workers belong to a union (syndicat) at their place of employment. About twice the proportion of permanent workers as of seasonal workers and of males as females are members of a union. The large female seasonal work force (52 percent of all workers) is the least involved in union membership with only 8 percent as union members.

Employer-Provided Insurance and Health Benefits

Only a small minority of workers (16 percent) report having health insurance coverage from their employers. Permanent workers were nearly four times more likely to have health insurance as seasonals, while twice the proportion of male workers as of females have such employer-provided coverage. The large population of female seasonal workers are the least covered by this benefit (only 8 percent).

An even smaller minority of workers (9 percent) report having life or permanent disability insurance coverage from their employers. Permanent workers were three times more likely to have this benefit, while nearly twice the proportion of males as females so benefit. All groups remain largely uncovered, however, male permanent workers having the highest rate of coverage (24 percent) and male and female seasonals with the lowest (6 percent).

About one-third (36 percent) of all workers report having a retirement or pension plan from their employers. Nearly three times the proportion of permanents as of seasonal workers and about 1 1/2 times the percentage of males as females have this benefit. The highest level of coverage is for male permanent workers (71 percent), and the lowest is found among the very large population of female seasonal workers (22 percent).

Well over half (61 percent) of all workers report that their employer covers them for accidental injury at the work place. Permanent workers were exceedingly well covered (81 percent), while only about half of seasonal workers have this benefit. This disparity is true for male and female workers, with males considerably more likely to be covered than their female counterparts. Male permanents constitute the group best covered (88 percent) and female seasonals those least covered (52 percent).

Emergency medical assistance at the work place is generally provided by employers. Nearly two-thirds (64 percent) of all workers report the existence of such assistance. Permanent workers report this benefit considerably more often than do seasonals, while male workers are somewhat more aware of this service than females. However, only among seasonal workers is there a substantial differential awareness by gender. Only 57 percent of female seasonal workers report the existence of emergency assistance compared to 71 percent for all other workers combined.

Employer-provided family planning services are virtually absent from post-harvest horticultural firms. Less than 1 percent of workers report the existence of such a service.

Although virtually no worker reports the existence of family planning services at the work place, 70 percent of all workers responding to this question (15 percent of all workers did not) declare their interest in using pre-natal and family planning services, if provided by their employer. Permanent workers and males are substantially more favorable to the use of these services than seasonals or females. Female seasonal workers are least interested (60 percent) in using these services, if provided.

Child vaccination services provided by employers do not appear to exist in any of the 58 firms of the employee survey. No worker was aware of such services. On the other hand, a small group (17 percent) of workers report employee access to vaccination services through employers. There was no

difference in awareness between permanent and seasonal workers, while female workers were slightly more likely to report the existence of these services than their male counterparts.

An small minority (11 percent) of workers declare having received a medical examination through their employer prior to beginning work in their firm. There is virtually no difference in response between permanent and seasonal workers, while a slightly higher proportion of male workers than females appears to receive such an examination.

A very large majority of workers (79 percent) report the existence of employer-provided first aid services at the work place. On the other hand, about one-fifth of all workers (to their knowledge) do not have such basic assistance. A somewhat higher proportion of seasonal workers than permanents report first aid services, probably reflecting their more dangerous work environment on the production line. There is virtually no difference between male and female workers in their awareness of such services at the work place.

Only one-quarter of all workers (25 percent) report the existence of a medical doctor at the work place, largely a function of the wide range of firm size in the survey. About twice the proportion of seasonals workers as permanents report the presence of a doctor, and about 1 1/2 times the percentage of males as females are aware of this service. Female permanents are least aware of this facility (4 percent), a somewhat unusual finding probably reflecting the isolated and safe environment of clerical workers (21 percent of female permanents are secretaries).

The question of whether employers reimburse employees' medical expenses outside the work place is probably linked to the question of employer-provided medical insurance. Overall, 25 percent of respondents indicated that the employer reimbursed at least some of their outside medical expenses, a percentage higher than those claiming employer health insurance (16 percent). However, only 9 percent of workers claimed that the employer reimbursed all outside expenses, a proportion less than those claiming to carry an employer-supplied health insurance plan. Eleven percent of permanents and 9 percent of seasonals claimed full coverage of outside medical expenses by employers, while 25 percent of permanents and 12 percent of seasonals reported partial coverage. Fifteen percent of all male workers reported full coverage and 22 percent claimed partial reimbursement by employers of outside medical expenses. On the other hand, 6 percent of all females reported full coverage, while 13 percent claimed partial coverage of outside medical bills.

There are distinct employment status and gender differences reported by workers with regard to this issue. Looking at gender differences by status, 45 percent of male permanents and 29 percent of female permanents report full or partial coverage of outside medical expenses by their employer. On the other hand, 33 percent of male seasonals but only 16 percent of female seasonals claim such coverage.

Nearly one-third (32 percent) of all workers report having access to maternity (or paternity) leave at their work place, although the average leave is but 3 1/2 days. The proportion of permanent workers benefitting from such leave was over twice as great as for seasonals, and male workers are about 2 1/2 times more likely to have such a benefit as females. Male permanents benefitted in greatest proportion (74 percent), while female seasonals benefitted least (18 percent). The high level of singleness among female workers explains part of this figure.

EMPLOYEE PERFORMANCE AND MOTIVATION

Worker performance, or productivity, was assessed through a number of indirect or subjective measures. These measures include survey questions related to absenteeism, work stoppages, training received or desired, and subjective response by workers to questions relating to work facilitation, satisfaction, and motivation.

Absenteeism and Work Stoppages

Permanent workers, who alone normally qualify for annual paid leave, take an average of slightly more than 20 days vacation each year. Males on average take nearly 50 percent more leave than females. It is not clear why this gender-based disparity exists.

Although workers on average are out sick during the year a little less than 6 days, permanent workers tend to be out nearly twice as much as seasonal workers. While little gender difference exists between male and female permanent workers, male seasonals take substantially more time off (67 percent more) than females. This is probably due to the greater number of days they take off from work on average each year to engage in job seeking.

The greatest disparity in sick leave taken, however, exists between female permanent and seasonal workers. Female permanents are absent from work for illness well over twice as much as female seasonals. Paid sick leave for permanents probably explains this difference.

Workers take a total of nearly 13 days off each year on average, excluding paid leave for permanents. Permanents take off on average nearly one-third more days than do seasonals. Seasonal males, however, appear to be out somewhat more than permanent males, while permanent females are out more than three days for every two for seasonal females.

While sick leave explains much of this time out of work, maternity/paternity leave for permanent employees accounts for about 3 1/2 days, with nearly one day more for males on average than for females. These last averages are for all workers, not just those taking maternity/paternity leave.

Job seeking time off by seasonal workers averages nearly three days each year. Males take off from their work about 5 1/2 days annually to seek other employment, a figure over three times greater than that for female seasonals.

Idleness in the work place from machine breakdown does not seem to be a major problem for workers, who, nonetheless, are usually not paid if they cannot work. Seasonal workers report about 1 1/3 days of stoppage with little difference between the packing and processing industries. Permanent workers do not report a significantly higher figure for stoppage than seasonals, but indicate about five times more delay in processing than in packing. Delays are not great, however, and loss of productivity from machine breakdown appears of little significance in both the packing and processing industries.

Self-Measurement of Job Performance by Workers

Worker responses to a set of choices concerning measurement of job performance reveal some interesting gender-based differences, with significant disparity also between permanent and seasonal workers.

Overall, over half (52 percent) of all workers consider achieving satisfactory output as most important in measuring job performance. Female and seasonal workers were stronger in their appreciation of this measure than males and permanents. Twice the proportion of female permanents as male permanents and over three times the percentage of female seasonals as males value this measure. Satisfactory output includes an appreciation of both quantity and quality of output per unit of time, respect for product technical specifications, good packing, and proper labelling.

Professional behavior, which includes seriousness, punctuality, enthusiasm, good relationship with managers, and a serious work ethic, was ranked second, but well behind achieving output, in importance by workers as a measure of job performance. Overall, 14 percent of all workers considered professional behavior as an important means by which to evaluate their job performance and that of their colleagues. Both permanent and seasonal workers valued this measure in similar proportion, but males overall valued this measure more highly than females.

Third in importance in evaluating job performance, according to workers, was efficiency and rapidity of work, which includes peacefulness, efficiency, rapidity, no delays, no need to be urged on, and lack of problems in accomplishing the work. Overall, 9 percent of workers considered this an important measure of job performance. Males tended to prefer this option more than females, particularly among permanent workers.

A rather large number of respondents, particularly female, were not able to provide a means, subjective or objective, by which they might judge their job performance. Overall, 22 percent of all workers feel incapable of determining how to measure performance. Female permanent workers are most unable (31 percent) to offer any measure by which to evaluate job performance.

Training Courses for Workers

Increasing worker productivity depends in large measure on training. The employee survey, however, shows that very few workers — about 1 percent — have ever received any formal training.

A sizeable proportion of workers (22 percent), however, express a desire for formal training. There is a clear tendency for permanent and male workers to appreciate the value of formal training compared to seasonal and female workers. Least interested in training was the important group of female seasonal workers (13 percent). Most interested were the male permanents (46 percent).

Factors Enhancing Work Performance

The four most important factors, according to workers, in facilitating their work are work rhythm (cadence), safety of equipment used, supervisor's instructions, and a seated work position. A number of other potential factors were not rated as significant by workers.

Overall, 61 percent of all workers considered work rhythm to be an important issue. Permanent and seasonal workers both concurred in equal proportion on the importance of cadence, while male workers, particularly among permanent workers, found this issue of less importance to them in permitting ease of work. The tendency for female workers to place greater value on work rhythm is probably related to the less specialized, more routine nature of much of their work.

A substantial percentage of workers (78 percent) named work place safety as an important issue in facilitating their work. Nevertheless, they ranked this issue first among all factors less frequently than

work rhythm. Seasonal and female workers tended to place greater importance on this factor than permanent workers and males. This is particularly true of female seasonal workers. It is likely that seasonal women place significantly more emphasis on work place safety, because of their greater exposure to machinery.

While considered third in importance among factors affecting ease and efficiency of work, a large proportion of workers (70 percent) rated clarity and appropriateness of supervisors' instructions or orders as important in their work place. While overall there is no difference between male and female workers in rating this issue, seasonals tend to place slightly greater importance on supervisors' instructions than do permanent workers. Female seasonal workers place the greatest emphasis on this issue (72 percent), probably because of the speed with which operations have to be carried out on the line.

Fourth in importance as a perceived issue in job ease is that of a seated position, although it is considerably less important than the three other work-facilitating factors. Only 36 percent of workers rated the issue as important, although females were much more likely (68 percent) to do so than males. There was only a slight tendency for permanent workers to rate this issue higher than seasonals. Both female permanent and seasonal workers rated this issue as important more frequently than their male counterparts. On the other hand, about a quarter of workers (28 percent), equally divided by tendency between men and women, found this issue to be unimportant in providing a performance enhancing environment.

Factors Affecting Worker Satisfaction

Work hours, rated most frequently as the most important satisfaction in the work place, was considered by three-quarters of workers (75 percent) as satisfactory in their work place. Permanent and seasonal workers were equally satisfied with their schedule. Male workers showed some tendency to rate their hours as satisfactory more often than females.

Having indicated amount of pay as the second most important issue among factors procuring work satisfaction, about two-thirds (64 percent) of workers declare themselves dissatisfied with their salary. There is remarkable consistency in this feeling among permanent and seasonal and male and female workers.

In spite of major dissatisfaction with their level of remuneration, most workers (84 percent) are satisfied with the regularity of their pay, rated by them as the third most important factor affecting their work satisfaction. Differences between permanent and seasonal and male and female workers are not great, although there was a slight tendency for males to be more satisfied than females. Female permanents are more satisfied than their male counterparts, while this tendency is reversed among seasonals, where males are more likely to be satisfied with the regularity of pay.

Fourth in order of importance of those factors felt to procure job satisfaction, the level of getting along with co-workers (interaction, cooperation) was found to be satisfactory by most workers (91 percent). There is remarkable consistency among permanent and seasonal and male and female workers in this appreciation.

Factors Influencing Worker Motivation

Of the four most important motivating factors for workers in the post-harvest horticultural sub-sector, a sufficient salary — in this case a salary meeting more than basic needs — is by far the most

popular. Almost all workers (96 percent) rated this factor as important in motivating them to work, although 64 percent feel that they are not sufficiently well paid. There is considerable degree of uniformity in rating this issue, just as there is in feeling dissatisfied with their level of remuneration.

The second most popular motivating factor for workers is the opportunity to advance one's career and increase the salary level. A very large majority of workers (87 percent) rated this issue as important. Permanent workers and males tended to value this factor of forward progress more than seasonals and females, but interesting gender-based differences exist within the permanent and seasonal worker groups. Female permanent workers were more likely to value this factor than male permanents, while the tendency is just the opposite among seasonal workers. Female seasonals valued this factor least of all groups, probably because the concept of career and steps in increased pay have little meaning to this numerically important, but least empowered, category of workers.

Employer-provided insurance coverage falls far below other work motivating issues in worker estimation. Although 95 percent of all workers consider it an important issue, very few rated it as the most important issue. Consistency of response between permanent and seasonal and male and female workers is remarkable, but consideration of its importance reflects far more a desire for such coverage than a recognition of its current value in motivating employees. Actual health insurance coverage by employers is limited to about one-third (34 percent) of permanent employees and a fraction (9 percent) of seasonals, while less than a fifth (17 percent) of permanents and only 6 percent of seasonals have employer-provided life or permanent disability insurance. However, employers do provide accidental injury insurance to four-fifths (81 percent) of permanent workers and to slightly over half (55 percent) of seasonals.

Fourth in perceived importance among factors affecting worker motivation is employer-provided credit and a savings plan. Fully three-quarters (75 percent) of workers consider this issue to be important. Permanent workers tend to place greater importance on this benefit compared to their seasonal colleagues, while greater female preference for the importance of this factor over males is slight. Female permanent workers tend to place significantly greater importance on this factor than males, while the difference between seasonal workers is insignificant.

Although these issues of credit and savings are moderately popular among workers, they reflect more a desire than a reality, since only about one-quarter (27 percent) of workers (35 percent of permanents and 25 percent of seasonals) report receiving credit from their employers.

Least Important Factors Motivating Workers

According to workers, the four least important factors influencing worker motivation are, in order of increasing importance: maternity leave, family planning services at the work place, day care center for children at the work site, and children's health services.

Although no worker considers employer-provided maternity leave of prime importance, slightly less than one-half (45 percent) of all workers still considered this an important issue. There is little difference of opinion between permanents and seasonals on this benefit, but, not unsurprisingly, a considerably higher proportion of all female workers compared to males (40 percent higher) consider this benefit to be important in their motivation to work. This trend is equally true for male and female workers of both permanent and seasonal status. Nevertheless, the issue of employer-provided maternity leave is very low on the list of worker priorities.

Only slightly higher on the list of motivating factors, one up from the least motivating, the issue of employer-provided family planning services is, nonetheless, considered an important issue by about one-third (31 percent) of workers. Seasonal and female workers tend to value this benefit slightly more than permanents and males. Seasonal workers are about one-third (38 percent) more likely to rate this issue important than permanents, but the overall gender difference is slim, and the slight gender gap is constant across seasonal and permanent employment status.

A significant preference on the part of seasonals for this issue remains unclear, since virtually no worker, permanent or seasonal, currently receives family planning services from employers. There appears to be an expressed need here on the part of seasonals, both males and females almost equally.

Slightly higher in popularity than maternity leave or family planning services among workers is the issue of having access to an employer-provided child care facility at the work site. One- third of all workers feel this issue to be important. Seasonal and female workers feel the issue to be more important in greater proportion (about 25 percent more in each case) than permanents and males. The gender gap is significantly greater (50 percent more) among seasonals than among permanent workers.

More popular among workers than the other three least motivating factors for work performance, but nevertheless, 14th of 17 on the list, is employer-provided child health services. In spite of its low level of priority among all issues rated, over half of all workers (55 percent) rate this factor as important in motivation. Seasonal and male workers show a tendency to value this factor more than permanent and female workers, but the difference is not great. There is, however, a pronounced disparity between male and female permanent workers, males being about 51 percent more likely to favor child health services than their female counterparts. Male permanents are, moreover, about 18 percent more likely than male seasonals to value this benefit.

This rating of the issue of child health services, while low on the list of priorities, nevertheless, expresses a felt need, since no worker indicates the presence of child vaccination services at the work place.

Moroccan Agribusiness Employment Survey Project
Final Report

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VOLUME IV

QUALITATIVE SURVEY: CASE STUDY

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315

TABLE OF CONTENTS

Page

CHAPTER ONE

INTRODUCTION AND METHODOLOGY 1

INTRODUCTION 1
METHODOLOGY 1
Questionnaire 1
Choice of Post-Harvest Horticultural Activities 2
Choice of Regions, Firms, and Workers to Be Interviewed 2
SCHEDULE OF ACTIVITIES 9
COMPOSITION OF WORK TEAM 9
METHOD OF CONDUCTING INTERVIEWS 10
DATA ANALYSIS 10

CHAPTER TWO

RESEARCH FINDINGS 11

INTRODUCTION 11
DEMOGRAPHIC CHARACTERISTICS OF WORKERS AND THEIR EFFECT ON EMPLOYMENT 11
Place of Birth and Migration 12
Marital Status 13
Characteristics of Interviewee's Families 15
Language and Communication 19
Segregation of Jobs by Gender 20
Conclusion 26
IMPACT OF EMPLOYMENT ON THE LIVES OF WORKERS 26
Perception of the Economic Significance of Employment 26
Women's Status Within the Family 28
Social Acceptance of Employment 31
Marriage, Divorce, and Employment 31
Desired Number of Children 33
EMPLOYEE MOTIVATION AND PRODUCTIVITY CONSTRAINTS 34
Evaluation of Performance 34
Workers' Perception of Productivity Constraints 38
Worker Motivation 43
ATTITUDES OF DIRECTORS TO PRODUCTIVITY 53
CONCLUSIONS AND RECOMMENDATIONS 55
Main Results and Conclusions 55
Recommendations 57

2\n

LIST OF TABLES

Table		Page
1	Firms Chosen — Case Study	4
2	Structure of Employment in the Post-Harvest Horticultural Industry: Mean Number of Workers in Each Category	6
3	Case Study: Number of Workers Interviewed by Category	7
4	Characteristics of Sample of Workers	8
5	Importance of Migration	12
6	Would You Still Work Here If You Were Married Now?	14
7	Number of People in the Family	16
8	Age of Family Members Living with the Interviewees	17
9	Rate of Financial Dependence of Family Members on Female Employees Interviewed	18
10	Why Are Women Chosen More for Certain Jobs?	21
11	Could Men Do This Job?	21
12	Appraisal of Wages	23
13	Can Men and Women Work Together on the Same Production Line?	25
14	Percentage of Reduction of Domestic Tasks of Interviewed Female Workers	29
15	When you Receive Your Salary, Do You Keep It Yourself?	29
16	Does Your Employment Give You Increased Personal Freedom and Power?	30
17	Desired Number of Children	32
18	Criteria for Measuring Performance	34
19	Average Hourly Output: Packaging of Tomato (Agadir)	35
20	Do Some Employees Work Better Than Others?	37
21	Do You Arrive Late for Work?	41
22	Do You Ever Leave Work Before the End of the Working Day?	42
23	Does the Company Offer You Incentives to Improve Your Output?	44
24	Do You Receive Sufficient Incentives?	45
25	Do You Have Opportunities for Promotion?	46
26	What Distance Do You Cover Daily to Reach Your Work Place?	49
27	Do Transportation Problems Prevent You from Doing Your Job Properly?	49
28	Would You Like to Have Canteen Facilities Available at Your Work Place?	50

CHAPTER ONE

INTRODUCTION AND METHODOLOGY

INTRODUCTION

The qualitative survey aims to study aspects of employment and productivity of male and female workers in the post-harvest horticultural export sector in more depth. The following questions will be given particular attention:

- Worker perception of employment and productivity motivations and constraints imposed both by the firm which employs them and their personal and family circumstances.
- The impact of employment on the lives of workers and their families.
- Perception of enterprise decision makers on employment and productivity management.

METHODOLOGY

Contrary to the quantitative survey which involved a large sample, the case study involved a limited number of workers (thirty-six).

We used mainly "open" questions in order to collect more opinions of workers on the problems studied and to better understand their personal and family situation. This type of interview revealed factors related to employment and productivity which had not been discussed in the questionnaires of the quantitative survey.

The interviews were carried out during the period May - June 1993.

To determine the sample of employees to be interviewed, several variables of the "ENTERPRISE" quantitative survey were analyzed by LOTUS and the "EMPLOYEE" questionnaires of the firms chosen were consulted.

Questionnaire

In order to determine the questions to be asked, we consulted 15 "ENTERPRISE" questionnaires and 50 "EMPLOYEE" questionnaires picked randomly from the different branches of activities in the sector studied. This revealed various aspects to be explored and studied in more depth in the case study (marital status of workers, migration, language, size and composition of family home, relationship worker/social and family circle ...). Working sessions with coordinators and interviewers employed in the quantitative survey allowed us to distinguish several questions which needed to be developed such as those relative to productivity (measurement, incentives, work difficulties).

A preliminary questionnaire for workers was tested with 6 employees. This test revealed the need to incorporate some new questions and to reformulate others (see Appendix 1).

A different questionnaire was made for directors of the firms selected, better adapted to their situation and position (see Appendix 2).

Choice of Post-Harvest Horticultural Activities

The quantitative survey revealed the predominance of two activities in the post-harvest horticultural industry: processing and packaging.

Cold storage of exportable horticultural produce appears to be closely related to packaging and very few companies deal solely in cold storage of citrus, early vegetables and flowers.

We, therefore, orientated the case study towards processing factories and packing stations handling horticultural produce.

Choice of Regions, Firms, and Workers to Be Interviewed

Given the limited number of cases to be studied, it was important to make an appropriate choice of regions, companies and workers to be interviewed.

Choice of Regions

We opted for two regions which are representative of the export-orientated horticultural post-harvest sector: Agadir and Marrakech. Indeed,

- Thirty-seven percent of processing units involved in the quantitative survey are located in Marrakech (10 out of a total of 27 processing units interviewed).
- Fifty-nine percent of the packing stations for horticultural produce investigated are located in the Agadir region (17 out of a total of 29 stations interviewed all over Morocco).

Choice of Firms

Only five firms are involved in this study, two processing units in Marrakech and three packing stations in Agadir.

This double example (two processing units and three packing stations) revealed a variety of different situations.

Given the limited number of firms involved, our choice of firms does not pretend to be representative of the sector. Indeed, in the post-harvest horticultural industry as well as differences in activities (processing and packaging), there are also different types of firms depending on size and range of products handled (the latter depending, moreover, on the region in which the firm is located).

Within this framework, the choice of firms was based on the following criteria:

- Commodities treated

  — For the packing stations, we opted for early vegetables

  — For processing, we chose olives (preserved and olive oil), apricots, capers and gherkins.

  In both cases, the commodities chosen are handled by the largest number of firms in the chosen regions. Thus, out of 123 post-harvest horticultural companies listed in Agadir, 50 percent deal in early vegetables; for Marrakech, 74.4 percent of post-harvest horticultural firms deal in processing of olives and 3.5 percent in processing of fruits and vegetables[1]. It should be noted that as far as processing units in Marrakech are concerned, the "ENTERPRISE" survey revealed that they are not usually specialized and handle several commodities including mainly olive, apricot and condiments (this is the case of 7 out of the 10 processing units interviewed).

- Amount of tonnage exported over 50 percent:

  As this is an important sector for exports, our choice lay with firms which commercialize a large proportion of their produce on foreign markets.

- Amount of products handled

  — For early vegetables, we chose two firms which handle below average tonnage of goods in the sector and one firm which handles above average tonnage.

  — For processing, we chose one firm which handles above average tonnage of olives in the sector and one which handles below average tonnage.

  In this way, we could select firms of different sizes as this can have repercussions on employment in the sector.

- Size of labor force

  We used the same reasoning as above. Therefore, we chose firms with a smaller than average labor force for firms in the field (2 early vegetable packing stations and one processing factory) and two firms with a larger than average labor force (one processing factory and one early vegetable packing station).

Table 1 presents our sample of firms by region and area of activity.

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[1] See Volume II, Final Research Design and Methodology, Appendix C.

TABLE 1

FIRMS CHOSEN - CASE STUDY

Region/ Activity/ Firm	Number of Workers	Tonnage Handled (Tons) (TT) and Tonnage Exported (% of finished product) (TE)									
		Packing				Processing					
		Early vegetables		Citrus		Olives**		Condiments		Fruit***	
		TT	TE*	TT	TE	TT	TE	TT	TE	TT	TE
MARRAKECH/ PROCESSING											
Mean/Processing Firm in Morocco	283	-	-	-	-	4.146	95	1.394	95	2.263	84
0401	696	-	-	-	-	8.700	99	300	99	1.500	99
0402	273	-	-	-	-	3.000	95	250	100	3.000	100
AGADIR/ PACKING EARLY VEG.											
Mean/Packing Firm Primeurs Morocco	87	7.237,5	65	18.221**	73****	-	-	-	-	-	-
0812	57	2.758	76	-	-	-	-	-	-	-	-
0813	51	3.467	62	-	-	-	-	-	-	-	-
0808	356	11.611	65	12.900	79	-	-	-	-	-	-

Source: "ENTERPRISE" questionnaire

* This figure corresponds to the mean tonnage of all early vegetables exported by firm in all packing stations sampled

** Data for preserved olives

*** Particularly canned apricots

**** Mean tonnage of citrus in all unit packaging this raw material

Choice of Employees to Be Interviewed

Choice of Worker Categories. In the "ENTERPRISE" questionnaire (question no. 16), we looked at 16 categories of workers taking into account their role in the firm, their qualifications and their gender.

A frequency analysis of this data reveals a weak representation of certain categories in many firms and a strong concentration of workers in the category 'unskilled seasonal workers' (71.3 percent of the total average number per firm out of 59 firms interviewed) and in the category 'unskilled permanent workers' (12.3 percent of the total). Nevertheless, the latter category is more frequent in the processing factories than in packing stations. In both categories, women are largely represented (see Table 2).

Based on the above, we gave preference to the two above-mentioned categories in this case study. We also interviewed directors and supervisors, who are important in making decisions and in the daily management of employment and productivity of the firms.

Table 3 shows the number of workers interviewed by category. A large number of unskilled seasonal workers, particularly women, were interviewed thus reflecting employment structure in this sector.

Selection of Workers Interviewed Within Each Category. Employees to be interviewed were selected from the group of workers already interviewed in the 'EMPLOYEE' survey in order to obtain more complete and varied information.

Workers within each category were selected using the following criteria:

- Seniority: at least one year's seniority in the chosen firm, even for seasonal workers. Employees who have worked in the firm for a long time are better informed than new recruits on worker/employer relations.

- Age: between 18 and 60 years old for a better understanding of the relation family/employment; employees under 18 years old are often dependent on their families and less stable professionally.

- Marital status: different family status are taken into consideration in order to give a variety of situations.

- Origin: we interviewed both workers native in the region where the firm is located and immigrants in order to compare both types of cases.

- Receptivity and open mindedness of workers

- Number of children: we chose workers with and without children in order to get the reaction of both groups.

Table 4 shows the characteristics of interviewed workers by firm.

222

TABLE 2

STRUCTURE OF EMPLOYMENT IN THE POST-HARVEST HORTICULTURAL INDUSTRY:
MEAN NUMBER OF WORKERS IN EACH CATEGORY

Category*	ENTERPRISE SURVEY						CASE STUDY : Firms Chosen									
	Total Sample (59 firms)		Processing		Packing		Packing Stations						Processing Units			
							0813		0812		0808		0401		0402	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1) DIRM	1,44	0,66	1,59	0,56	1,28	0,82	1	1,96	1	1,76	1	0,28	2	0,29	1	0,37
2) DIRF	0,08	0,04	0,11	0,04	0,03	0,02	0	0	0	0	0	0	0	0	0	-
3) ADSM	2,12	0,98	3,30	1,16	1,10	0,71	0	0	2	3,51	2	0,56	3	0,43	2	0,73
4) ADSF	0,22	0,10	0,37	0,13	0,10	0,07	0	0	0	0	0	0	0	0	1	0,37
5) TECM	2,20	1,01	3,15	1,11	1,38	0,88	2	3,92	0	0	2	0,56	3	0,43	1	0,37
6) TECF	0,17	0,08	0,22	0,08	0,14	0,09	0	0	0	0	0	0	1	0,14	1	0,37
7) PERM	3,07	1,42	4,11	1,45	1,90	1,22	1	1,96	0	0	4	1,12	4	0,58	3	1,1
8) PERF	2,25	1,04	4,19	1,48	0,48	0,31	0	0	0	0	2	0,56	3	0,43	4	1,47
9) SPEMM	16,10	7,42	25,04	8,84	7,93	5,08	2	3,92	3	5,26	19	5,34	20	2,87	0	-
10) SPEMF	0,61	0,28	1,30	0,46	0,03	0,02	0	0	0	0	0	0	0	0	0	-
11) UPEMM	14,37	6,63	26,81	9,47	3,59	2,30	0	0	1	1,75	12	3,37	60	8,62	8	2,93
12) UPEMF	12,42	5,68	25,78	9,10	0,41	0,26	0	0	0	0	0	0	0	0	42	15,38
13) SSEMM	5,10	2,35	9,56	3,38	1,83	1,17	0	0	0	0	0	0	0	0	0	-
14) SSEMF	2,14	0,99	4,11	1,45	1,72	1,10	0	0	0	0	0	0	0	0	0	-
15) USEMM	40,46	18,67	38,19	13,48	40,83	26,16	10	19,61	14	24,56	82	23,04	150	21,55	30	10,99
16) USEMF	113,98	52,59	135,41	47,81	93,31	59,79	35	68,63	36	63,16	232	65,17	450	64,66	180	65,93
TOTAL	216,73	99,94	283,22	100	156,07	100	51	100	57	100	356	100	696	100	273	100

Source : "ENTERPRISE" Survey

Key

M = male; F = female; DIR = director; ADS = administrative staff; TEC = technical staff; PER = personnel staff; SPEM = skilled permanent employees; UPEM = unskilled permanent employees; SSEM = skilled seasonal employees; USEM = unskilled seasonal employees

TABLE 3

CASE STUDY: NUMBER OF WORKERS INTERVIEWED BY CATEGORY

Regions/ Firms	Managers	Super-visors	UPW*		USW**		Total
			M	F	M	F	
Marrakech							
0401	1	1	-	3	1	3	9
0402	1	1	1	-	-	5	8
Agadir							
0812	1	1	-	-	1	5	8
0808	1	1	-	-	1	6	9
0813	1	1	-	-	1	4	7
TOTAL	5	5	1	3	4	23	41
%	12	12	2	7	10	56	100

* Unskilled Permanent Worker
** Unskilled Seasonal Worker

224

TABLE 4

CHARACTERISTICS OF SAMPLE OF WORKERS

Firm	Employee Code	Category[1]	Seniority in the firm	Job	Age	Origin[2]	Marital Status[3]	Number of children
MARRAKECH 0401	040103	Supervisor	2 yrs	Product. Head	31 yrs	Errachidia (M)	M	2
	040106	USEMM	4 "	Male worker	30 "	Marrakech (N)	M	2
	040112	USEMF }	3 "	Female worker	23 "	"	S	-
	040113	" }	3 "	"	25 "	"	S	-
	040116	" }	4 "	"	50 "	"	W	6
	040123	UPEMF }	22 "	"	45 "	"	D	2
	040124	" }	4 "	"	25 "	"	S	-
	040128	" }	23 "	"	50 "	"	M	7
0402	040208	Supervisor	3 yrs	Product. Head	28 yrs	Ouarzazate (M)	S	-
	040203	UPEMM	36 "	Male worker	57 "	Marrakech (N)	M	5
	040209	USEMF }	1 "	Female worker	18 "	"	S	-
	040215	" }	2 "	"	34 "	"	D	-
	040217	" }	4 "	"	24 "	"	S	-
	040218	" }	1 "	"	34 "	Kelaa Sraghna (M)	D	-
	040220	" }	3 "	"	23 "	Marrakech (N)	S	-
AGADIR 0813	081309	Supervisor	11 yrs	Head of Stat.	40 yrs	Agadir (N)	M	6
	081302	USEMM	1 "	Box counter*	24 "	"	S	-
	081306	USEMF }	6 "	Female worker	55 "	"	M	6
	081307	" }	5 "	"	21 "	"	S	-
	081310	" }	5 "	"	27 "	Marrakech (M)	S	-
	081311	" }	3 "	"	31 "	Khouribga (M)	M	2
0808	080811	Supervisor	20 yrs	Head of Stat.	36 yrs	Khemisset (M)	M	3
	080814	USEMM	15 "	Tipper**	30 "	Taroudant (N)	D	1
	080801	USEMF }	15 "	Female worker	42 "	Safi (M)	M	6
	080802	" }	8 "	"	30 "	El Jadida (M)	D	1
	080804	" }	6 "	"	33 "	Mohammedia (M)	D	1
	080805	" }	20 "	"	40 "	Safi (M)	M	4
	080808	" }	20 "	"	32 "	Taroudant (N)	S	-
	080809	" }	6 "	"	21 "	Agadir (N)	S	-
0812	081211	Supervisor	20 yrs	Head of Station	34 yrs	Safi (M)	M	5
	081210	USEMM	7 "	Assistant	21 "	El Houceima (M)	S	-
	081202	USEMF }	10 "	foreman	35 "	Safi (M)	M	8
	081203	" }	15 "	Female worker	55 "	Safi (M)	M	11
	081204	" }	15 "	"	42 "	Safi (M)	W	2
	081201	" }	22 "	"	40 "	Ben Slimane (M)	W	-
	081205	" }	5 "	"	45 "	Essaouira (M)	W	6
				"				

Source: "ENTERPRISE" and "EMPLOYEE" questionnaires

Key: [1] See key for Table 2; [2] Origin: (M) migrant, (N) native of region where firm is located; [3] M = married; D = divorcee; S = single; W = widow

SCHEDULE OF ACTIVITIES

The case study was based on the following timetable:

DATE	TASKS ACCOMPLISHED
April 1993	- Preliminary questionnaire - Methodology of sampling of employees
May-June 1993	- Composition of work team - Contacts with firms - Programming of interviews - Pre-testing of questionnaire - Printing of final questionnaire - Interviewing
July 1993	- Preliminary report
September 1993	- Final report

COMPOSITION OF WORK TEAM

The members of the team who participated in this qualitative survey are the following:

- Concept and setting up of study and analysis of results

  — Mrs. Maria Neyra Faqir, project director
  — Mr. Mohamed Faqir, assistant project director

- Interviewing

  — Mrs. Maria Neyra Faqir (Agadir & Marrakech)
  — Mr. Mustapha Taoura (Agadir)
  — Mrs. Fatima Oumzai (Agadir)
  — Mr. Khalid Bensouda (Marrakech)
  — Mrs. Nouzha Chérif (Marrakech)

In Agadir, the project director participated in all interviews with the assistance of Mr. Taoura and Mrs. Oumzai.

In Marrakech, with the approach of the AID EL KEBIR feast and the risk of numerous seasonal workers leaving the region to return to their villages, and also due to the dates of interviews proposed by the firms, the project director could not participate in all the interviews. However, working sessions with the interviewers (Mr. Bensouda and Mrs. Chérif) proved most useful in controlling and interpreting the questionnaires which they had filled in.

METHOD OF CONDUCTING INTERVIEWS

Interviews of employees were conducted within the production units.

At first, we tried to contact workers outside their work place, but this aroused the distrust of managers, who were sensitive to the fact that their workers had already been interviewed in the quantitative survey and were being interviewed again.

Managers of the chosen units allocated us offices where we could talk freely with the employees.

The interviews were conducted in Arabic and the information transcribed in French on the questionnaire.

Each interview lasted an average of 1½ hours. This amount of time was necessary to establish a dialogue and tackle questions touching on the personal and professional life of workers. Moreover, as the questions were open, the interviewees were sometimes lengthy in explaining their opinions.

DATA ANALYSIS

Analysis of questionnaires was done manually because of the large number of questions expressing opinions and the size of the sample. This took a long time as all the opinions expressed were transcribed, question by question, in order to "visualize" the type of responses obtained. This process facilitated the choice of citations to be included in the text to illustrate the various opinions of interviewees on the subjects discussed in the interviews.

Frequent manipulation of the questionnaires had the advantage of facilitating understanding of each case as a whole and thus enable us to better appreciate the interrelation between the variables considered in the study.

Later on, the frequency of certain responses were tabulated; these frequencies are often in actual numbers, given the limited number of cases.

CHAPTER TWO

RESEARCH FINDINGS

INTRODUCTION

On the whole, the data from the qualitative survey of workers are divided by gender and mainly concern permanent and seasonal workers.

Few questionnaires were filled in by supervisors and they were used mainly to better understand certain aspects of the firm related to productivity.

Distinction between employees of different regions and in different post-harvest horticultural activities was not always made because the nature of some questions did not require it. This is also true for some questions concerning the personal life of workers, particularly female employees, whose answers depended more on their family status than on the type of work accomplished.

Data resulting from the survey of managers are presented separately because, as has already been stated, a different questionnaire adapted to their position in the firm was used. Nevertheless, to amplify our understanding of some aspects studied, reference is made to this survey in the section devoted to workers.

DEMOGRAPHIC CHARACTERISTICS OF WORKERS AND THEIR EFFECT ON EMPLOYMENT

Some demographic characteristics of workers interviewed (age, gender, family circumstances, place of birth, migration and job held in the firm) were obtained from the "EMPLOYEE" questionnaire and are shown in Table 4.

Our objective here is to further develop this aspect in order to discern the impact of personal characteristics of workers on employment.

TABLE 5

IMPORTANCE OF MIGRATION (N = 36)

Region where firm is located Firm Code No.	Native Workers		Migrant Workers		Total
	M	F	M	F	
MARRAKECH					
0401	1	6	-	1	8
0402	1	4	-	2	7
SUBTOTAL	2	10	-	3	15
AGADIR					
0808	1	2	1	4	8
0812	-	-	2	5	7
0813	2	2	-	2	6
SUBTOTAL	3	4	3	11	21
TOTAL	5	14	3	14	36

Place of Birth and Migration

In our survey, the proportion of migrant workers out of the total number of workers differs according to region. Thus, in Marrakech, the majority of workers interviewed were native to that region whereas the Agadir firms employ a majority of men and women from other regions of the country. This is very pronounced in the case of women working in early vegetable packing stations in the Souss.

However, this conclusion is not valid for all Agadir stations as some employ local women. This is the case for station 0813: the pick-up point of the personnel truck, particularly in the TARRAST quarter, is a meeting place for women from the region looking for employment.

Each town seems to have its own particular economic zone of impact. Marrakech attracts mainly migrants from Ouarzazate, Kelaa Sraghna and Errachidia, whereas migrants in Agadir come more from coastal towns (Safi, Essaouira, El Jadida).

Migration often seems to be related to a search for employment (11 out of 17 migrants); for the others, migration took place a long time ago with the whole of their family (parents or husband) before they began looking for work. It should be noted that among migrants we can find equal numbers of married women, widows or divorcees but only one single woman who came from Chichaoua and works in Agadir.

"There was nothing to do in the country." - 081202, married

"In my native region, there was no work. I had to leave for the survival of my family." - 081204, widow

"I couldn't live off dryland agriculture. There's no work in the countryside." - 081203, married

Close friends or relations are sometimes responsible for migration:

"Someone from my village recommended that I come here to look for work." - 081201, widow who came before losing her husband

"I had family in Agadir who recommended me coming here to seek employment." - 080801, married

Almost all men and women interviewed intend remaining in the region where they now are. They seem to have migrated permanently:

"I live here now." - 040218, divorcee, arrived since childhood

"I live here and I got married here." - 080801, married

"I cannot return to my village. Not because I am ashamed to be divorced, but because there is nothing to do there." - 080802, divorcee, originally from El Jadida

The majority of migrant women came to work in the firm in which they are presently employed. They went to the doors of the factory or station and stayed.

"I am used to working in this firm." - 081205, widow

"I know most people who work here and I like it." - 080804, divorcee

"I've been working in this firm for 22 years. I come back every year." - 081201, widow

"Each firm keeps the same employees." - 080802, divorcee

The high proportion of migrant workers in Agadir does not affect employee stability of firms because none of these migrants are expecting to return to their region of origin permanently. Even though they are mainly seasonal workers, they are attached to the firm which employs them and return each year at the beginning of the working season; thus they are often long-standing workers with accumulated experience which is a great advantage for the firm.

Marital Status

Even though for the majority of interviewed workers a low family income is the reason why they seek employment, the predominance of unmarried women — single, widows and divorcees — among workers in this sector suggests some relationship between family status and employment. When questioned, the majority of women admit that the fact that they are women on their own made them look for work:

"I have no-one, I have to provide for myself." - 081201, widow with no children, 40 years old

"I have to help my family, my father is old and my brothers are too young." - 040218, divorcee with no children, 34 years old

"I have no other income." - 081205, widow, 6 children, 45 years old

However, when asked "Would you still work here if you were married now?," the answer is not unanimous:

TABLE 6

WOULD YOU STILL WORK HERE IF YOU WERE MARRIED NOW?
(N = 19 unmarried female workers)

Marital Status	NO	YES	It would depend on my husband's position	TOTAL
Single	5	-	5	10
Widows	1	3	-	4
Divorcees	3	1	1	5
TOTAL	9	4	6	19

Around half of the women interviewed believe that their present job is incompatible with the role of housewife:

"It is too difficult a job because of the hours." - 040124, single woman, 24 years old

"The hours are too long in this job, it is tiring. I would prefer to stay at home and bring up my children." - 040218, divorcee, no children, 34 years old

"I would prefer to rest and be a housewife." - 040220, single woman, 23 years old

Others added:

"The man should work. The woman should stay at home. That is our custom." - 080809, single, 21 years old whose mother is a long-standing employee at the same station

"The husband will take care of me." - 080804, divorcee, 33 years old, lives alone

A minority are willing to help their husband:

"We should work even if we are married." - 081204, widow, 42 years old, 2 children

Six women, 5 of which are single, have no fixed opinion. For them, this would depend on the financial circumstances of the husband:

"If he is well off, I would leave my job." - 040112, single, 23 years old

This variety of answers reveals a new attitude on the part of women. For more than half the interviewed women, marriage is not always synonymous of financial dependence on the husband. Their material circumstances and their initiation into the working population encourages them to play an active role in meeting the family's needs:

"Helping one another within the couple is a positive thing." - 081201, widow, 40 years old, no children

It is often the younger and single women who distinguish marriage and employment. Is this because they are unaware of the material difficulties they would have to face? These young women are, in any case, a minority and it is difficult to say whether their attitude would remain the same later on as they know they are capable of working.

In concluding, it should be noted that the questions discussed above are totally unsuited to male employees. A bachelor, 081302, when questioned replied:

"My marital status has nothing to do with my work. I work because I need to."

Characteristics of Interviewee's Families

The data presented below is grouped by the gender of the person interviewed. We wanted to first of all present and further develop the characteristics of the family of women interviewed as there are more women in our sample and we are particularly interested in exploring the reciprocal relationship which exists between their family circumstances and their employment.

Size of the Family

According to this study, there is a regional difference as far as the size of families is concerned: in Marrakech, two-thirds of women interviewed belong to families with more than 7 members whereas in Agadir 73 percent of women have a family consisting of 6 or less people.

TABLE 7

NUMBER OF PEOPLE IN THE FAMILY
(N = 26 female workers interviewed)

	Number of People in Family					Total No. Female Workers
	0	1 - 3	4 - 6	7 - 9	10-12	
MARRAKECH						
Single	-	-	1	5	-	6
Widows	-	-	-	1	-	1
Divorcees	-	1	1	-	1	3
Married	-	-	-	-	1	1
SUBTOTAL	-	1	2	6	2	11
AGADIR						
Single	-	-	3	1	-	4
Widows	1	1	-	1	-	3
Divorcees	1	1	-	-	-	2
Married	-	1	3	2	-	6
SUBTOTAL	2	3	6	4	-	15
TOTAL	2	4	8	10	2	26
%	8	15	31	38	8	100

Single and married women come mainly from large families (7 or more members) belonging to a small family circle ("nucléaire") (parents and children).

Widows and divorcees seem to have smaller families (0 or 1 to 3 members). All these women, except one divorcee in Marrakech, left their original family to look for work in Agadir.

"I live alone. My daughter stays with my mother in Mohammedia so that I can work. I couldn't find work there." - 080804, divorcee, 33 years old, came to Agadir 10 years ago, seasonal migrant

These widows or divorcees live in family surroundings often including their children and other relations (extended family).

The fact that the interviewee comes from a small or large family indicates the importance of family needs which these workers have to satisfy. But, in the case of widows or divorcees, they are often solely financially responsible for meeting their own needs and those of their family; even if it is small, their family is an important economic pressure on their salary.

Age of Family Members

The predominant age range for family members living with the interviewee is between 15 and 60 years old; this group includes people of an age to work. Nevertheless, the survey revealed that the occupation rate of members of the family is small, as we can see below.

TABLE 8

AGE OF FAMILY MEMBERS LIVING WITH THE INTERVIEWEES
(total number of people) N = 24 female workers*

Age	Number of people
age 3 and under	3
4 to 6 years old	5
7 to 14 years old	31
from 15 to 60 years old	99
more than 60 years old	14
TOTAL	152

* Out of 26 female workers interviewed, 2 live alone and are not included in this table

Rate of Financial Dependence

This rate is measured as follows:

$$\frac{\text{Number of family members attending school and unoccupied}}{\text{Total number of family members}} \times 100$$

This rate is useful to understand the economic significance of the employment of the female workers interviewed within their own family circle.

In general, this rate is very high: 66 percent on average which indicates that two out of every three family members are financially dependent. Forty percent of these dependents attend school and the rest are unoccupied; the majority of the latter are over 15 years old.

Table 9 reveals that the rate of financial dependence of the family is quite high whatever the marital status of the interviewee. It is less than 50 percent for only 5 women of which two live alone but send a part of their wages to their family. Nevertheless, the latter two are completely responsible for their own expenses.

TABLE 9

RATE OF FINANCIAL DEPENDENCE OF FAMILY MEMBERS
ON FEMALE EMPLOYEES INTERVIEWED

Marital Status	75 to 100%	< 75 to 50%	< 50%	TOTAL
Single	4	4	2	10
Widow	1	2	1	4
Divorcee	1	2	2	5
Married	2	5	-	7
TOTAL	8	13	5	26

Two women interviewed are solely responsible for all family expenditure (one widow and one married woman). For the others, there are always 1 or 2 members of the family apart from the interviewee who hold a paid job; nevertheless, two thirds of those employed are seasonal workers, which indicates the precariousness and irregularity of family income.

These results explain the fact that 73 percent of the women interviewed spend all their salary on their household; the others, particularly single women, spend part of their salary on personal expenses.

Male Workers and Their Families

Economic pressure of the family on salaries of male workers is more important than for the women interviewed. The average rate of financial dependence of families of 5 workers interviewed is 76 percent which means that 3 out of every 4 family members does not earn any salary. Moreover, 2 out of 5 male workers interviewed are 100 percent responsible for family expenses. However, these results are to be expected in that Moroccan social conventions require that the man plays the role of breadwinner. Women's contribution to financing the family's needs is new. Despite tradition, the family circumstances of these women mean that they have to be and remain employed. This, in turn, has the advantage of putting women in a more forceful position within the family and sometimes even within their social circle: henceforth she is no longer dependent and represents a considerable contribution to the family income.

Young Children

As far as this factor is concerned, it was of no consequence for male workers interviewed because those who have young children leave them at home with their mother.

When it is the mother who works outside the home, finding day care for the children can be difficult. Nevertheless, in the majority of cases this problem was solved thanks to family support.

The 8 women interviewed who have children under 10 years of age all agreed that having young children was not an obstacle to their work:

235

"My husband is at home, sick, he doesn't work. So, he looks after the little ones." - 081202, married, 8 children

"My oldest daughter looks after the little ones." - 080805, married

It is true that sometimes the eldest daughter is under 14 years old but as she does not attend school, she takes on the role of looking after the younger children:

"She is too young to work at the station." - 081205, married

Two female workers left their young children with their family:

"My mother looks after her during the working season. In summer, I return to the village to look after her." - 080804, divorcee, one child

Those women whose children are presently over 10 years old (6/26 women interviewed) state that they worked even when their children were small, half of them full-time and the other half part-time.

"I had no choice." - 040128, married, mother of 8 children

"I had to work to feed them." - 081204, widow, mother of 2 children

"I worked to pay their schooling, and all their needs." - 081203, married, 11 children

"I worked to help out my husband, to cover the cost of building our little house." - 080805, married, 4 children

Language and Communication

Work instructions are given in Arabic in all the companies studied, but three female employees from three different firms stated that they received instructions in Arabic and French.

When asked "Do you easily understand instructions given by your bosses at work?," all women replied affirmatively, even 4 native berber speakers interviewed who work in the Souss region.

"I was born here in the Souss (Agadir), but I understand Arabic. I went to school (secondary level)." - 081307, seasonal worker

Furthermore, none of the women workers expressed the need to receive instructions in a language other than Arabic. These results indicate that there are no communication problems between employers and workers as far as working instructions are concerned. Certainly, all over Morocco, Arabic is the working language even in berber territory as in the Souss, where, it appears, employees have no trouble following instructions from their bosses.

Nevertheless, in canning factories and packing stations, a lot of technical expressions are used (calibration, sorting, palettisation) which are difficult for those not in the know. However, the special products treated and methods of packaging/processing used by the firms result in repetitive tasks whose names are apparently easily picked up by employees. Another element needs to be considered: we interviewed employees who have worked in the company for an average of 10 years, which obviously

makes understanding instructions much easier. New employees may have difficulties at the outset but often will be placed among a group of experienced workers in order to make their apprenticeship easier and reduce errors.

In finishing, we would like to cite a remark made by a company director concerning communication between management and workers:

> *"I would like to have younger and more educated workers. In this way we could ensure that workers understand the importance of proper sorting and calibrating. At the moment, the women workers work mechanically, without really understanding the economic consequences of the quality of their work...." - 0808, early vegetable packing station*

From these remarks, it appears that real communication between management and employees within a company is not only a question of language but also of personnel training.

Segregation of Jobs by Gender

There is a marked division by gender of jobs within packing stations and processing units for horticultural products.

In both types of units, female workers are employed for sorting, grading and packaging. Other manual tasks (tipping raw material onto sorting belts, picking up boxes, paletting, weighing, etc.) as well as some qualified jobs (checking machines, transportation, handling goods, control of staff and goods) are done by male workers. Furthermore, administration and management of units are often the responsibility of male staff.

This division of jobs by gender is reflected in the distribution of wages. Although there is no difference in wages between men and women for any one job, female workers are not employed for certain jobs and thus, earn less than male workers who are employed in better paid jobs.

This segregation by gender which, in reality, is a constraint on employment and wages, does not seem to be perceived negatively by female workers. It does not seem to be a constraint on productivity either.

An investigation of the attitude of staff to this situation is extremely revealing and enables us to better understand conditions of employment in the sector.

Division of Work by Gender

Jobs Reserved for Female Workers. For the majority of workers interviewed, 24 out of 31 male and female workers, women are employed for sorting, grading and packaging because they have manual and visual skills and the patience necessary for this work. Men cannot do these jobs because they do not possess these qualities. Moreover, a small group believes that this kind of work is "female" work, men should do other jobs. According to them, the division of work reflects the aptitude of each gender to different activities (see Table 10).

TABLE 10

WHY ARE WOMEN CHOSEN MORE FOR CERTAIN JOBS (NUMBER OF ANSWERS)*

Type of response	N = 5 Male Workers	N = 26 Female Workers	Total
. Women are more patient and obedient than men	2	9	11
. They have better manual and visual skills	3	19	22
. They have a greater need of employment	1	5	6
. This job does not require any special training	1	4	5
. They are more physically resistant	2	3	5
. They will accept the wages offered for this job	-	4	4
. It is women's work	1	8	9
. Others	2	5	7
TOTAL	12	57	69

* Each person can give several responses

This attitude is confirmed by their refusal to allow men to be employed in jobs presently allocated to female workers:

TABLE 11

COULD MEN DO THIS JOB? N = 36 cases

	Female workers N = 26	Male workers N = 5	Supervisors N = 5	Total
Yes	4	3	1	8
No	22	2	4	28
TOTAL	26	5	5	36

This is what they said:

"It is women's work. They don't know how to do it." - 081202, female worker

"Each to his own job. This is female work." - 040123, female worker

"Men should do heavy work. They do not have the patience and delicacy required." - 081201, female worker

"It is an easy job for men." - 040209, female worker

"This kind of job is meant for women." - 040106, male worker

"We do not have the patience required." - 040203, male worker

As for supervisors, in Agadir they agree with the workers:

"This is the traditional division of tasks," "Men have never done this job," Women are more careful."

Supervisors in Marrakech are divided. For some:

"Men are not meticulous enough," but for others: *"This job does not require any special training, it can be done by anyone."*

Furthermore, male and female workers who believe that men could do jobs which are presently reserved for women, admit to some reticence:

"The job is easy. But they believe it is reserved for women." - 080804, female worker

"They could do it, if they needed to." - 080801, female worker

"Male workers could do this job if they were trained." - 081302, male worker

Female Participation in Jobs Reserved for Men. When questioned on the reasons for the large proportion of men in management and supervision of firms, female workers were divided into two groups: those who believe that this is due to a difference in the level of education between men and women ("if women were educated, they could do all jobs," 080808, female worker) and those for whom this situation is "normal" because men are in positions of authority:

"In general, people listen more to a man." - 040220, female worker

"Men have more forceful personalities." - 040123, female worker

"It is his destiny. Women cannot take this responsibility." - 040128, female worker

"Men are authoritative." - 040215, female worker

As far as heavy duties are concerned, the majority agree that "it is a difficult job for women."

"These jobs require strength and physical resistance." - 080802, female worker

"They have the strength to do heavy work." - 081201, female worker

"It is a man's job." - 081307, female worker

The men agree. Thus:

"At the station, work is divided the same as in the home. Women do the cooking at home and the packaging in the station." - 080814, male worker

"Difficult jobs (transport, heavy handling....) cannot be done by women. On the other hand, if they have training, they can get administrative jobs." - 081302, male worker

TABLE 12

APPRAISAL OF WAGES

	If men do jobs reserved for women, should they be better paid?				If women take on men's work, should they be better paid?			
	YES	NO	DON'T KNO W	TOTAL	YES	NO	DON'T KNOW	TOTAL
Female workers	7	14	5	26	8	10	8	26
Male workers	2	2	1	5	1	3	1	5
Supervisors	2	2	1	5	1	3	1	5
	11	18	7	36	10	16	10	36

Wage Differences

The diversity of responses to these questions is surprising if we consider that the general minimum industrial salary (SMIG[1]) is the same for both genders. The majority of female employees who responded negatively said:

"The SMIG is applied. We cannot ask more than that." - 040112, female worker

"It is an easy, if boring, job for them." - 040123, female worker

Those who are undecided one way or another indicated:

[1] SMIG: salaire minimum industriel général.

"In any case, they would not do this job." - 080809, female worker

In the same way, female employees who stated that men should be better paid, said that this was the custom and that men would refuse to do so-called women's work:

"They are men! It's the tradition." - 080808, female worker

"Yes, to save their dignity because it is a woman's job." - 081311, female worker

"They would ask for higher wages because they would not be satisfied with the working hours." - 081307, female worker

Male workers and supervisors responded similarly to women both in the case of positive and negative responses.

Similarly, when asked "Should women be better paid if they do men's jobs?" responses were varied.

Those who responded negatively indicated that the SMIG is applied, and that

"Generally, men earn the maximum wage." 040209, female worker.

As for those who responded positively, they indicated that "women would have to work harder," 040123, female worker and 081302, male worker

"Women are not made for this job." - 040203, male worker

Supervisors are clear on this question as they know about the SMIG, but one of them indicated:

"They should be paid more because they would have more responsibility." - 081211, supervisor

Different attitudes of personnel vis-à-vis wages to be attributed to men and women reveals a lack of knowledge of social laws but also, the weight of social prejudices concerning gender distinction and maybe a bad experience at work:

"Women can earn the same wages as men but it depends on the factory where they work." - 040124, female worker

TABLE 13

CAN MEN AND WOMEN WORK TOGETHER ON THE SAME PRODUCTION LINE?

	Female workers	Male workers	Supervisors	Total
YES	4	-	3	7
NO	22	5	2	29
TOTAL	26	5	5	36

Mixing of Male and Female Workers

It appears from Table 13, that there is clear opposition from workers in general to mixing male and female workers on the same production line, specifically on sorting and packaging tables.

Reasons for this are, however, varied. For some women, it is tradition which forbids this mixing:

"It is shameful. Tradition requires that men and women be separated." - 081306, female worker, married, 6 years' seniority

"It wouldn't work. Women refuse to work with men." - 081310, female worker, single, 5 years' seniority

"I don't know. I have never seen such a thing." - 040209, female worker, single, 1 years' seniority

"He couldn't because he's a "man." Men would not accept to do women's work." - 040215, female worker, divorcee, 2 years' seniority

For others, mixing of genders on the same work table could be a source of conflict between workers which could in turn affect productivity:

"There would be arguments between men and women. Why? Because the women would be jealous of each other, there would be some kind of sexual rivalry among men and women, the men would want to be in charge.... It could even create problems with our superiors." - 081201, widow, 22 years' seniority

"It wouldn't work. It would not be taken seriously. It could only be envisaged if female workers were not available." - 080814, tipper, divorcee, 15 years' seniority

Finally, for one third of those interviewed, the division of work is based on the capacity of each gender and management decisions:

"Men should do heavy handling of goods. Every one has their own special job. Men and women should not be mixed." - 080801, female worker, married, 15 years' seniority

"Each to his own job, that's just the way it is." - 040203, male worker, 36 years' seniority

"The plant manager does not allow it and he knows why." - 081307, single, 5 years' seniority

Supervisors are divided on this question. For those in factories in Marrakech:

"There is no problem, on the same production line there are jobs which require different skills."

Supervisors in Agadir, on the other hand, are more reticent:

"Men and women can work side by side, as long as they are controlled to avoid time wasting." - 081211, supervisor

It should be noted that a minority of women can see no difficulty in working together with male employees.

"There is no difference between men and women as long as we are all here to work." - 040220, married female worker, 3 years' seniority

"If it is necessary for the job, why not?" - 040116, widowed female worker, 4 years' seniority

Conclusion

The effect of gender on assignment of jobs, and the relationship between gender and tasks does not seem to have an impact on productivity in the present circumstances. Division of tasks is a historical and sociological fact which is welcomed by all and never questioned.

The rare advantages enjoyed by male workers are totally accepted by female workers who believe that men who do a job which requires a greater physical effort deserve better wages.

IMPACT OF EMPLOYMENT ON THE LIVES OF WORKERS

In this part of the study, the data presented concern only women interviewed. The questions asked are in themselves more appropriate to female than to male workers. The factors taken into consideration are, in effect, only significant to women who work outside the family home. As for men, having a paid job is something society accepts and even desires.

Perception of the Economic Significance of Employment

It appears obvious, throughout this study, that the female labor force in the post-harvest sector works mainly to ensure its keep and that of its family. With the exception of one single woman from a family with 4 to 7 members in permanent employment (081307), all women replied affirmatively to the question: "Do you work to cover your basic needs?"

Some are formal: *"I work to feed my children."* (several widows and divorcees) but the single women, on the other hand, are divided into two groups: those who work to help out their family and those who, while giving part of their salary to their mother, also want to have *"their own money"*:

"I did not go to school. My father was sick and my mother worked here to feed us while I looked after my sisters and brothers. As soon as I was 17, I got myself employed by the station." - 080809, single

"I wanted some money to eat, to buy clothes, to help my family." - 080808, single, 32 years old, with 20 years' seniority, lives with mother and handicapped brother.

None of these women can possibly work less or stop working:

"I am the only source of income in the family." - 040218, divorcee, no children but living in a household composed of 10 members of which only one works occasionally

"I would die of hunger." - 040215, divorcee with no children, living with her sister and nephew

"The cost of living is high." - 040113, single

Nevertheless, when asked: "Do you need to work more?," 6 women replied negatively; they presently work 8 to 12 months a year depending on the case, except for one married woman and one single woman:

"No, I cannot, it is too much for me." - 081202, married, 8 children

"No, I want a little time free for myself." - 0800809, single, 21 years old, works 6 months at the early vegetable packing station and 2 months in a fish canning factory

The others would like to have an extra job. Some of them are female workers from Agadir who work only 6 months a year, but 12 out of the 26 women interviewed work more than 9 months, or even the whole year, in factories in Marrakech:

"Yes, to live better." - 040215, divorcee, works 11 months a year in a factory

"Yes, to better help my family who stayed in our village." - 081201, widow, works 6 months a year in the station and takes in washing for others

"Yes, the salary is not enough. My children are studying." - 081203, married, 11 children, works 6 months a year at the station

This determination to work more is understandable because their work is seasonal: in Agadir the working season of some early vegetable stations, particularly the smaller ones, does not exceed six months of the year; in Marrakech, the factories sometimes function longer depending on the variety of raw materials treated.

Besides, these female workers are paid by the hour worked but this salary is not fixed as the daily work hours are not regular: in effect, a working day can vary from 14 to 3 hours depending on the needs of the firm.

"Today I worked from 7 to 10 a.m. I would like to be employed elsewhere for the rest of the day." - a single woman in Agadir and a divorcee in Marrakech

Women's Status Within the Family

Participation in Domestic Duties

In Morocco, responsibility for household chores is the lot of women. Our interviewees are no exception given that 23 out of the 26 women interviewed help with domestic tasks. However, their irregular hours and long working days during the peak period of the season prevent them from being solely responsible for household chores in the house.

In effect, fruit and vegetable packing stations function irregularly. There are days when the tonnage of raw materials is high and these fruit and vegetables must be packaged as soon as possible to preserve their freshness and quality. In this case, the labor force remains until all goods are sent out for export.

For factories processing fruit and vegetables, the problem is similar. For example, factories dealing with processing of apricots work intensively during the short period of harvesting of this fruit which is easily perishable; thus the working days can be long.

In this case, whatever the marital status and age of female workers, because of the long hours involved in their job, they are often relieved of part of their household chores, as indicated in Table 14.

However, three women, two who live alone and one widow with just one son at home, have to do all the household work.

The others state that they are helped by their mother and daughters, or even their sisters. None indicated that the male members of the family helped with domestic tasks with the exception of one married woman whose husband is sick and does not work.

Nevertheless, their temporary employment in factories and packing stations allows the seasonal workers to take charge of their household during the times when there is no work. This is also the case for Sundays: this "day of rest" is often devoted to completing domestic duties. It should be noted that permanent workers (040123, 040124 and 040128) who work 11 months of the year are not necessarily relieved of domestic tasks more than other women. They do have help but only up to 30 to 50 percent of household chores.

Furthermore, this reduction of responsibility for household activities is not always seen as an advantage. This is the case particularly for women with young children who state with regret: "I have no choice, I have to leave the house to earn money." This is also true for 9 unmarried women who hope to "find a husband, rest and stay at home."

It is nonetheless true that female workers are aware of the advantageous position they hold within the family: they are partially relieved of household tasks because they work and bring home an income.

TABLE 14

PERCENTAGE OF REDUCTION OF DOMESTIC TASKS OF INTERVIEWED FEMALE WORKERS
(N = 26)

Marital Status	0%	< 50%	50 - 75%	> 75 - 90%	100%
Married	0	2	3	2	0
Single	0	0	6	2	2
Widows	2	0	2	0	0
Divorcees	1	1	3	0	0
TOTAL	3	3	14	4	2

TABLE 15

WHEN YOU RECEIVE YOUR SALARY, DO YOU KEEP IT YOURSELF?
(N = 26 cases)

Region/ Family Status	YES	NO	If no, to whom do you give it?	
			Mother	Father
MARRAKECH				
Single	-	6	5	1
Widows	1	-	-	-
Divorcees	3	-	-	-
Married	1	-	-	-
AGADIR				
Single	1	3	3	-
Widows	3	-	-	-
Divorcees	2	-	-	-
Married	6	-	-	-
Total	17	9	8	1

Control of Income and Participation in Family Decisions

Apart from one single woman who keeps the total amount of her salary, the other single women give their parents a large portion of their salaries between 50 and 100 percent of their income. Often it is to the mother that this money is given in order to cover family expenses and she will also decide how the money should be used.

The other women, married, widows or divorcees, state that they keep all their pay and decide how it should be spent.

"I earn this money. So I decide what should be bought at home." - 040128, married, only person working in a household of 10 people

"My parents are old. I decide for them." - 040218, divorcee

"I am the only person working in my family. I know what I want." - 081201, widow

Only one married woman stated that she "sometimes" gave some money to her husband.

From the survey, it would appear that male authority, be it father, brother or husband, over the wages of the female workers interviewed is weak. For married women, this follows family tradition and custom which leaves women in control of their possessions and income when married.

The contribution of women interviewed to household expenses also gives them some say in the making of family decisions both financial and others. However, once again, single women were the exception because in their case it is the father (5 out of 10 cases) or the mother who decides.

This indicates that so long as they are "not married" or "single," they remain under the family guardianship even if they bring home an important financial contribution. Contribution to the family expenses is not in itself a guarantee of an increased participation in family decisions.

TABLE 16

DOES YOUR EMPLOYMENT GIVE YOU INCREASED PERSONAL FREEDOM AND POWER?
(26 cases)

Family Status	In your home		Among your neighbors and social circle	
	Yes	No	Yes	No
Single	9	1	4	6
Widows	4	-	4	-
Divorcees	5	-	3	2
Married	7	-	7	-
TOTAL	25	1	18	8

Personal Freedom

"Yes, I am free, because I don't feel anyone is responsible for me. - 040215, divorcee

Apart from one single woman, it is clear that employment allows the women interviewed a personal freedom and a certain power within their family surroundings. Financial contribution to the family income does, therefore, play a role in reinforcing women's position in the home. For married women, this power is increased if the husband is out of work.

The situation vis-à-vis neighbors is different. A group of single and divorced women, all working in processing factories in Marrakech, do not feel that their employment allows them more freedom in their social circle. For the most part, these women live in old working-class districts of Marrakech where women's role remains very traditional. In Agadir, the situation is different, perhaps due to the fact that the working-class female population is often migrant and lives in newly installed quarters around the packing stations; by their break with their original family, this population is in the process of establishing new social rules where women who work are accepted.

Furthermore, migrants are unanimous in stating that thanks to their job they have more freedom vis-à-vis their family and ex-social circle. It should be noted, however, that as they often migrated a long time ago and permanently, links with their original home may have been relaxed.

However, if they are aware of the freedom acquired thanks to their employment, they do not always see this as an advantage:

> *"I am free, but what do I do with this freedom without money? I have responsibilities, a son. I would prefer to be married and stay at home rather than have more freedom, if the man is good...." - 080802, divorcee*

Social Acceptance of Employment

In general, the women interviewed judged that their employment was well perceived by their close friends and neighbors. More, for certain divorcees, being in paid employment enabled them to be better accepted in their social circle:

> *"Why should they reproach me for working? I am poor, I have to work and do no-one any harm." - 081204, widow, 2 children*

> *"It is not the fact that I work that they reproach me with but for being divorced." - 080802, 30 years old, 1 child*

> *"If I did not work, the neighbors would gossip about me. Working gives me some respectability." - 040218, divorcee, 34 years old, no children*

On the other hand, married women stated that their husband had a favorable attitude to their work. Only one worker in Agadir, whose husband is a cobbler, thinks that he is indifferent to her job.

As the attitude of others towards employment outside the home is well perceived, working becomes an asset for these female workers and reinforces their social position.

These results reveal an important evolution in Moroccan society with new attitudes towards the social role of women.

Marriage, Divorce, and Employment

Marriage is not always felt to be a constraint to the type of work which the interviewees do. Actually, half the women interviewed agree that:

"Women must help their husband when he is not well off." - 040116, widow

"Needs are great and the cost of living is high." - 080805, married

"When necessary, marriage is not an obstacle to working." - 040218, divorcee

On the contrary, 10 women out of 26 interviewed, for the most part single and living in Marrakech, believe that:

"This work is too tiring, it would be unbearable if we also had look after a home." - 040112, single

"It is impossible to work here if you are married because the women are mixed together with the men. They should stay home. Women who work here have a bad reputation." - 040113, single

"Some couples met in the factory but the woman stopped working after they got married." - 04, divorcee

Some divorcees are not quite as sure:

"If the husband accepts, why not? - 040215, divorcee

It should be noted that among women who did not consider marriage a constraint to working in a processing factory or packing station, some replied negatively to the question: "Would you work here if you were married now?" (4 women: 080805, 081205, 080804, 040218). This reveals some ambiguity as, it appears that if the woman was financially able to do so, she would stop working.

Further, the great majority of women interviewed did not consider their employment as a cause for divorce (65 percent of cases) or only rarely (27 percent).

TABLE 17

DESIRED NUMBER OF CHILDREN

Marital Status	Desired Number of Children					Total
	1	2	3	4	No reply and unsure	
Single	4	4	1	1	-	10
Widows	-	1	1	-	2	4
Divorcees	-	2	-	1	2	5
Married	-	2	4	-	1	7
Total	4	9	6	2	5	26

Desired Number of Children

This table reveals a clear preference for a small number of children. Half of the interviewees considered one or two children the ideal number:

"I have two, that's enough, even if I remarry. Even so, I dream of finding a husband." - 040123, divorcee

"I was pregnant when I got married, but my husband left me before I gave birth. My baby died. Now, I believe in family planning: two children is enough as times are hard." - 040215, divorcee, no children

"I would like only one child. They are too much responsibility and restrict women." - 040220, single

"I would like to have two children. Cost of living is high and children are very tiring." - 040112, single

"I have six children, I desired them all. I got married when I was young and had no idea about life. But now I think that 3 children is enough. I had my tubes tied 12 years ago." - 080801, married, 42 years old

"Three children is enough. I could hardly keep them alive." - 040124, single

However, two women, one single and the other divorced, desired four children:

"I have only one child. I would have liked to have four, I love children. Before I got married, I bought the pill at the pharmacy." - 080802, divorcee, 30 years old

Some women have no precise reply, such as this married woman who seems very confused about contraception:

"I have 4 children but I tried to stop at 2. I took the pill but as I am sick (cardiac rheumatism) I was advised against taking it. So I stopped and I had my daughter. I took the pill again for 6 years and stopped again thinking that after all these years of taking the pill, I could no longer have children. I got pregnant. At the moment, I am taking the pill again. As for a coil, I think it is not advisable in my case because my job is very strenuous." - 080805, widow, 40 years old

Contraception seemed to be a subject of great interest to the women interviewed. They seemed very aware of the financial difficulties facing large families as well as the limits for themselves.

On the contrary, the men interviewed were less sure:

"I have a daughter from my first marriage who lives with her mother. I only see her once a year. I don't know how many children I would have if I remarry. Allah decides." - 080814, divorced, 30 years old

EMPLOYEE MOTIVATION AND PRODUCTIVITY CONSTRAINTS

This part of the study deals with the analysis of workers' perception of factors which affect their productivity and which depend mainly on the relationship between the worker and the firm.

Three aspects will be investigated: the first concerns workers' evaluation of their performance, the second deals with their evaluation of productivity constraints and the third, their motivation to improve their performance.

Evaluation of Performance

Workers' definition of work performance varies enormously: sometimes qualitative and sometimes quantitative. Parameters used by workers to measure productivity are also very varied. However, these parameters can help to define and measure productivity in the sector studied; in the Moroccan post-harvest horticultural industry, there are no productivity norms for workers or performance criteria for each job.

It should be noted, however, that, given the size and aims of our case study, we were not interested in the variety of jobs in this sector but dealt mainly with grading, sorting and packaging of horticultural produce; this choice was due to the high concentration of seasonal workers in these jobs, female workers who make up the most important group of the working force in the firms investigated.

TABLE 18

CRITERIA FOR MEASURING PERFORMANCE
(number of responses/26 female workers)*

	MARRAKECH	AGADIR	TOTAL
1) Number of fruit, crates, palettes, boxes	3	15	18
2) Quality of packaging or processed product	6	1	7
3) Length of working day (more than 8 hours/day)	-	6	6
4) Employer satisfaction	-	1	1
5) Tiredness	2	2	4
6) Don't know	2	-	2
TOTAL	13	25	38

* Each worker could give several replies

251

Self-Appraisal of Performance

This medley of replies indicates a lack of a common concept of productivity: for most female workers, performance is expressed in the amount of work accomplished (number of crates packed or hours of work) but some allude to the quality of work and the satisfaction of employers. For them all, nevertheless, being productive means "working hard."

In effect, many female workers stated that they were not required to reach a certain level of output or were unaware of such a level (12 out of 26 cases interviewed). Nevertheless, some stipulated that the output required depends on the quantity of raw material received by the production unit:

"If the station has to handle a large quantity of tomatoes today, the chain goes quicker and we have to sort quicker." - 081311, female worker with 3 years' seniority

In Marrakech, female workers indicated that there was a required quality of performance:

"According to my supervisor, we must not let olive waste get into the barrels." - 040112, female worker with 3 years' seniority

"What they require of me is to carefully select the best olives." - 040116, female worker with 4 years' seniority

As far as average yield per hour is concerned, questions were answered after some thought as they are not used to judging their performance:

"I have never thought to count the crates." - 080802, 8 years' seniority

So, in the same firm and for workers with the same level of experience, answers are varied. However, all workers indicated that it depends on the product to be handled (tomato, pepper, hot pepper, oranges). We noticed that women from the 0808 station — modern mechanized company — had a higher average output than women from the two other stations investigated (semi-mechanized); thus, for tomato, the main product handled, the responses were as follows:

TABLE 19

AVERAGE HOURLY OUTPUT: PACKAGING OF TOMATO (AGADIR)
N = 15 women workers

Stations	Number of boxes packed/hour*			
	Less than 15	From 15 to 20	From 21 to 30	From 31 to 40
0813	1	2	1	-
0812	1	3	1	-
0808	-	-	4	2
TOTAL	2	5	6	2

* Each box contains between 6 and 7 kg

257

Any further study should therefore take into account the product handled and the degree of mechanization of the production line.

Concerning female workers employed in factories in Marrakech, responses about productivity were so varied that it was impossible to use them. For olives, the female workers fill large barrels together and cannot evaluate their own output:

"The whole group (12 women) fills approximately 30 barrels a day." - 040123, female seasonal worker with 22 years' seniority

For them all, their output depends on the quality and quantity of raw material and instructions given by the foreman.

"If the foreman is anxious and the product is available, we have to work quickly and well." - 040217, female seasonal worker with 4 years' seniority

"If there is a rush on because of an excess of raw material, the foreman asks us to work faster." - 040209, female seasonal worker with 1 years' seniority

The same is true for the maximum output per hour. Female workers in Agadir (11 out of 15 cases interviewed) pointed out that the quality of raw material is essential to an improvement in productivity:

"If the tomatoes are good quality, there are less rejects and I can fill more boxes for export, up to 40 boxes/hour." - 081205, female worker with 5 years' seniority

"Depending on the quality of the goods and the amount to be handled, I can fill as many as 60 boxes/hour." - 080801, female worker with 15 years' seniority

Supervision of Working Performance by Supervisors

Our survey showed that methods used by supervisors to control performance differ from region to region:

- In Agadir, 12 out of 15 female workers interviewed believe that the supervisor measures their performance by the number of crates filled. Three workers also referred to the quality of their work.

- In Marrakech, the responses referred more to the quality of their work:

"For my supervisor, I work well if there are no olives with stones in the barrels." - 040113, female seasonal worker with 3 years' seniority

In fact, according to the supervisors, they require the same performance by all employees on the same production line. It is of course difficult to differentiate between workers on different parts of a conveyor belt with the same job, that is: to select and package a batch of raw material (e.g. tomato) which passes in front of them. Performance is often controlled globally: either by the number of boxes at the end of the line or at the end of the working day. Nevertheless, in time foremen and supervisors can distinguish good and bad workers, particularly those who talk too much as "their attention is not on the production line."

It should be noted that almost all male and female workers unanimously believe that the supervisors are competent in controlling performance. According to the workers, this is due to long experience.

Only one female worker (040123) said that the supervisors are competent because they are in charge.

Performance: Relation with the Work Group

How Does Your Work Group Measure Your Performance? In answer to this question, the majority of female workers in Agadir replied that the group judged their speed in sorting and packaging or the number of boxes filled:

"We are on both sides of a conveyor belt which brings in the raw material. So, theoretically, my work ends in the middle of the belt; if I overrun the middle of the belt, this means that I am faster than my partner opposite me. Arguments sometimes break out among us "you're not doing anything." The supervisor decides: he moves the employee." - 080808, female worker with 20 years' seniority

In Marrakech, the majority did not give a precise reply:

"I do not know. We all work together and it is difficult to differentiate between one worker and another." - 040112, female worker with 3 years' seniority

TABLE 20

DO SOME EMPLOYEES WORK BETTER THAN OTHERS?
N = 26 female workers

	AGADIR	MARRAKECH	TOTAL
YES	11	7	18
NO	4	4	8
TOTAL	15	11	26

Appraisal of Work Group's Performance. The majority agree that there is a difference in productivity among workers:

"Everyone is different. Some are more conscientious than others." - 040220, female seasonal worker, 3 years' seniority

"Some are lazy by nature and make less effort." - 040123, female permanent worker with 22 years' seniority

"Those who have been here longest work best because they have more experience." - 081311, 3 years' seniority

This difference is always expressed in speed of work. Nevertheless, those who do not agree, say:

"We are working on a production line and everyone works the same." - 080102, female seasonal worker with 10 years' seniority

It is, however, clear that, among colleagues, workers do differentiate those who give the best performance, on the basis of qualitative criteria: speed, conscientiousness, experience. In fact, seniority is a criteria of performance because it is related to experience and speed:

"Those who have worked for years are well appreciated. I myself have worked in packaging since I was 12 years old (I am now 40). I have worked in all different jobs, because at the beginning of the 1970's, men worked in sorting. That is why I am now a supervisor." - 081309, supervisor

Workers' Perception of Productivity Constraints

General Appraisal of Constraints

What are your main productivity constraints? Half the women interviewed (5 in Agadir and 8 in Marrakech) did not spontaneously list any particular constraints.

For the other half, however, various factors may perturb their output. First on the list are family or personal problems which were cited by 8 female workers.

"I have no problems at work. But, if the children are sick, I cannot concentrate. 081202, 10 years' seniority, 8 children

"Only if I am sick or if I have problems at home." - 080809, single woman

The long working hours (3 cases), tiredness (1 case) and coordination with the work group (1 case) were also cited:

"I slow down (packaging, labelling) when the group ahead of me (sorting) work badly and slowly." - 081307, 5 years' seniority

In order to further explore this aspect, we asked another question: what do you dislike most about your job? "I dislike nothing" was the reply from the majority of women workers in Agadir and some in Marrakech (5 out of 11 cases interviewed).

For the others, the most frequent reasons for discontentment were:

"The salary is very low. I can barely survive." - 081203, 15 years' seniority

"Standing up all day is very tiring." - 040215, 2 years' seniority, 34 years old

"I dislike everything here. I come by force; as if I was going to prison: it is too tiring especially during the peak production period." - 040124, female worker with 4 years' seniority

We can conclude that the main constraints are family problems; working conditions (hours, salaries, standing position) are also important but secondary for many workers.

Technical Constraints

Performance Required by the Firm. "Is it difficult for you to achieve the performance required of you?" This question was interpreted in terms of work required by the needs of the firm and not in terms of pre-established norms.

In this context, only 4 female workers employed in packing stations in Agadir admitted to having difficulty in achieving the required performance. This difficulty occurs when the tonnage to be handled is high and when rejects are high because of low quality of raw material, or:

"After intensive work, during a long working day, I am tired." - 081311, seasonal worker, 3 years' experience

Besides, it should be noted that no woman worker complained of difficulties in keeping up with the speed of the production line:

"There are no problems because, on the line, the work is the same for all the women. If one worker sorts badly, the next one can make up for it." - 080809, 6 years' seniority

Constraints Related to the Product. Are some products more difficult to handle than others? In Agadir, the majority of women answered affirmatively; being a vegetable producing area, the products cited were as follows: tomato (7 cases), hot pepper (3 cases) and potato (1 case). Tomato is the most difficult because sorting is complicated mainly because there are so many different colors to be differentiated (7), each color corresponds to a particular degree of maturity of the fruit. They must grade the fruit at the same time. On this, directors and supervisors are unanimous.

"Tomato is the most difficult product to handle because of the various sizes and colors. The machine (color selector) helps, but "turning" tomatoes (half red/half green) are badly sorted by the machine and the women have to control the results of this mechanical sorting." - 080811, supervisor

For hot pepper, one female worker said:

"I don't like sorting hot pepper, they prick and we have to sit on the floor." - 081307, seasonal worker, 5 years' seniority

In Marrakech, where there are a lot of processing units, olives are cited as being the only difficult product to be handled:

"Olives have a lot of waste. We have to be more careful." - 040124, 4 years' seniority

Training Period for New Recruits and Continuous Training for Personnel. In the packing stations in Agadir, female workers estimated that a new recruit takes between 2 and 7 days to learn the job, but can only be considered qualified after 2 months.

"Normally, it takes about a week to become familiar with the job. Now it is more difficult than before because the sorting criteria are more complicated." - 081311, 3 years' seniority

In the factories in Marrakech, the time required for a new recruit to learn the job is estimated, by the women interviewed, to be longer than in the packing stations in Agadir: it varies between 2 and 4 weeks. In both cases, it is clear that it is not difficult to learn the job.

The method of apprenticeship is always the same, that is: on the job.

In effect, experienced workers help the new ones to join in with the work, sometimes helped by supervisors, particularly in Marrakech.

"A new worker is always placed between two experienced colleagues so that she can learn the job." - 080808, 20 years' seniority

"The new recruits learn by practice and with explanations by supervisors." - 040215, 2 years' seniority

So, there is no special training given to new workers in the firm.

Further, the majority of workers do not desire further training to improve their performance:

"I have experience (15 years). I do not need any training." - 080801, 45 years old

"I know my job (6 years' experience). I know everything there is to know about sorting fruit." - 081306, 55 years old

"I cannot read or write and I am old (35 years) - what could I learn?" - 081202, female seasonal worker, 10 years' seniority

Only 4 workers recognized the advantage of continuous training:

"I could understand instructions from supervisors better." - 040220, female seasonal worker, 3 years' seniority, 23 years old

This is how some plant managers justify the need for continuous training of personnel:

"We need to explain to workers why orders must be followed both in quantity and quality. For example, if the label on the box does not correspond to the contents in weight, size or color, the package will be refused by European markets and it is a loss for us." -0812, director

Yet, as of the present time, the only apprenticeship practiced for new recruits is on the job. No continuous training is offered to long-standing employees despite severe demands of the European market when importing non-European horticultural produce. If this is a productivity constraint, the female workers are barely conscious of it; for them, the work is easy.

TABLE 21

DO YOU ARRIVE LATE FOR WORK
(more than 15 min) N = 31 workers

Description	No	Yes	Number of times a month		
			1	2 to 3	4 & more
Male					
Agadir	1	2	1	-	1
Marrakech	-	2	2	-	
Female					
Agadir	4	11	2	8	1
Marrakech	5	6	3	2	1
TOTAL					
Agadir	5	13	3	8	2
Marrakech	5	8	5	2	1
GENERAL TOTAL	10	21	8	10	3

Respect of Working Hours

Late Arrivals. A third of the men and women interviewed are never late for work. Some state that they live very near their work place — and others believe that late arrival would not be tolerated by the firm:

"I wouldn't be allowed in. If I arrive late, the day is lost." - 040215 and 040112, female seasonal workers with, respectively, 2 and 3 years' seniority

"I will be sent away." - 040124, female permanent worker, 4 years' seniority

Two thirds of the male and female workers interviewed stated, on the contrary, that they arrive late 1 to 3 times a month. Very few would be late 4 or more times a month. Overall, they are aware that their situation will not permit it.

Reasons for late arrival differ according to gender. Thus, 12 out of 26 of the female employees interviewed stated that they were late because they woke up late:

"I wake up late because I am tired after a hard day's work." - 080805, female seasonal worker, 20 years' seniority

"I am often tired in the morning. Also, I have to make the children's meal before I leave the house." - 081204, female seasonal worker, 15 years' seniority, 2 children

"I wake up late and sometimes I have problems at home (children sick)." - 081205, female seasonal worker, 5 years' seniority, widow, 6 children

Furthermore, both men and women, 11 out of 31 cases interviewed, stated that family problems sometimes kept them at home:

"I only arrive late when I have a family problem or when I have to sort out something personal." - 040203, male permanent worker, 36 years' seniority

Problems of transportation, particularly in Marrakech, are another important reason for late arrivals:

"I arrive late about once a month because my bicycle has a flat tire." - 040106, male seasonal worker, 4 years' seniority

"I arrive late about 4 times a month because the bus is late." - 040209, female seasonal worker, 1 years' seniority

"Sometimes I wake up late and miss the company truck. So then I have to get two buses to the station which may take 45 minutes." - 081311, female seasonal worker, 3 years' seniority

TABLE 22

DO YOU EVER LEAVE WORK BEFORE THE END OF THE WORKING DAY?
N = 31 workers

	Female workers		Male workers		TOTAL
	Agadir	Marrakech	Agadir	Marrakech	
YES	8	-	-	1	9
NO	7	11	3	1	22
TOTAL	15	11	3	2	31

Leaving Work Before Time. For the majority, particularly in Marrakech, it is impossible to leave work before the end of the day because "my supervisor would not allow it" or "because my job will not allow me. I have to keep count of the goods handled during the day" 081302, male worker who keeps count of boxes.

Those who replied affirmatively often spoke of "family affairs to be settled" or "if one of my children is sick."

Conclusion

From these interviews, it seems clear that working hours are generally respected although it can happen that some arrive a little late. Fear of losing their employment can explain this. Tiredness, family problems and transport difficulties are, in order of importance, the main explications given, particularly for female workers.

These results reveal that late arrival of workers is not an important constraint to productivity.

Worker Motivation

This aspect of the survey concerns all interviewees, both male and female workers.

General Attachment

Attachment to their job is general among all workers interviewed in Agadir and more than half the workers interviewed in Marrakech. The reasons for this attachment are varied:

"Managers are good to us. They respect us. I am not treated like a maid." - 081205, female seasonal worker, 5 years' seniority

"What I like here is the good relationship between colleagues: time flies by." - 080809, female seasonal worker, 6 years' seniority

"I have no choice, it's the best I can find. Otherwise, I would not have stayed here 20 years." - 080808, female seasonal worker

"This job enables me to survive: it is my source of income." - 081202, female seasonal worker, 10 years' seniority

"The work is easy. I cannot find a job elsewhere because this is the only thing I can do (sorting, grading)." - 040128, female permanent worker, 23 years' seniority

"I have no choice. I have no diplomas." - 040106, male seasonal worker, 4 years' seniority

Workers in Marrakech who are not satisfied with their employment declared:

"I don't like this job: it is too tiring." - 040220, female worker with 3 years' seniority

"I don't like it but where else could I get a job?." - 040113, female worker with 3 years' seniority

Overall, the difficulty of finding another job and good relationships with employers and colleagues are the reasons most often cited by workers concerning attachment to their job.

TABLE 23

DOES THE COMPANY OFFER YOU INCENTIVES TO IMPROVE YOUR OUTPUT?

	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
Agadir	3	0	14	1	17	1
Marrakech	1	1	0	11	1	12
TOTAL	4	1	14	12	18	13

Incentives

Incentives are given only in Agadir, with the exception of one case in Marrakech:

"We get a bonus at the end of the season. All workers benefit from it without distinction. There is no difference in bonus between workers: everyone gets the same amount." - 080809, female seasonal worker, 6 years' seniority

"I get a bonus of 500 to 600 DH a year." - 080805, female seasonal worker, 20 years' seniority

"I get a paid vacation of 250 to 350 DH a year. All employees get a bonus but the company doesn't make any distinction between those who work harder or better." -081203, female seasonal worker, 15 years' seniority

In Marrakech, some workers expressed themselves as follows:

"We work without expecting anything." - 040124, 4 years' seniority

"I have never been rewarded for my performance. Even if we work well, it is not recognized." - 040215, female seasonal worker, 2 years' seniority

"I do my job and that's it. I don't expect any reward." - 040106, male worker, 4 years' seniority

TABLE 24

DO YOU RECEIVE SUFFICIENT INCENTIVES?
N = 18 workers

	Male		Female		Total	
	Yes	No	Yes	No	Yes	No
Agadir	-	3	6	8	6	11
Marrakech	1	-	-	-	1	-
TOTAL	1	3	6	8	7	11

Satisfaction with Incentives. Out of 11 workers dissatisfied with incentives, 9 indicated that incentives were low compared to the cost of living. For 2 workers, incentives do not correspond to efforts made:

"The bonuses we receive are insufficient to encourage us. Other stations offer more (in Casablanca, Safi)." - 080805, female seasonal worker, 20 years' seniority

"We would like more money: the cost of living is high. However, I wouldn't like to work in another station. I am used to it here." - 081201, female seasonal worker, 22 years' seniority

The system of incentives used by horticultural post-harvest units (notably bonuses), is not applicable to all workers, particularly in Marrakech. Furthermore, those who benefit from them are not satisfied. This system does not seem to be a frequently used incentive to improve performance at work.

Type of Incentive Desired. For the majority of workers, they would prefer a cash incentive: bonuses (15 cases) or a salary increase (4 cases) or both (7 cases).

"Money, most of all money." - 081201, female seasonal worker with 22 years' seniority

Others emphasized another kind of incentive:

"All I want is that the supervisor doesn't complain." - 081203, female seasonal worker 15 years' seniority

"I would appreciate a bonus but more than anything I would like recognition of a job well done." - 040106, male employee with 4 years' seniority

As far as preferences for collective or individual incentives are concerned, workers are divided.

In Agadir, workers would prefer collective incentives:

"Everyone does the same job. There is no difference between us." - 081202, female seasonal worker with 10 years' seniority

"We are all equal. It is more democratic." - 080814, male seasonal worker with 15 years' seniority

"To avoid problems. So that there will be no jealousy among us." - 080805, 20 years' seniority

In Marrakech, workers tend to prefer individual incentives:

"Some employees work better than others." - 040106, male worker with 4 years' seniority

"Everyone should get what he deserves." - 040203, male worker with 36 years' seniority

"All workers are different. Some cheat." - 040116, female seasonal worker with 4 years' seniority

In reality, it is not easy for firms to set up a system of individual rewards: the individual level of performance of workers is not precisely known by supervisors or foremen. However, an individual system of bonus could prove more motivating than the collective bonuses presently used.

TABLE 25

DO YOU HAVE OPPORTUNITIES FOR PROMOTION?
N = 31 workers

	New job		Increase in salary		Would you like to be promoted?		
	YES	NO	YES	NO	YES	NO	DON'T KNOW
MARRAKECH							
Male	1	1	1	1	1	1	-
Female	1	10	11	-	2	1	8
AGADIR							
Male	2	1	3	-	2	1	-
Female	1	14	12	3	2	13	-
TOTAL							
Male	3	2	4	1	3	2	-
Female	2	24	23	3	4	14	8
GENERAL TOTAL	5	26	27	4	7	16	8

Promotion and Career Opportunities

Only 5 workers stated that they had an opportunity for promotion. Two of these were women: 081201, seasonal worker with 22 years' seniority and 040218, seasonal worker with 1 years' seniority. For them, it is a question of changing their status from a seasonal to a permanent worker.

As for the men, they expressed the following opinions:

"I presently keep count of boxes, but in time I can become an assistant accountant: I am educated." - 081302, male seasonal worker, 24 years of age with a secondary school education

"I have been working here for 7 years and I am now assistant foreman. I can become floor manager." - 081210, male seasonal worker, 21 years of age

"I can get promotion if I can master certain techniques ('cuisson')." - 040106, seasonal worker, 30 years of age, 4 years' seniority, illiterate, presently working as a heavy goods handler

Apart from these cases, no other workers indicated that they had any chance for promotion. Many women referred to their low level of education and qualifications (13 out of 26 women interviewed):

"Given my lack of education, a worker is the most I can hope for." - 040217, female seasonal worker with 4 years' seniority

"Sorting, packaging: these are the only things I can manage." - 080804, seasonal worker with 6 years' seniority

Others believe that a worker cannot expect anything more:

"We are workers and we will always remain worker." - 081203, female seasonal worker, 15 years' seniority

"I have been a worker for 15 years and no-one has ever offered me anything else." - 080801, female seasonal worker

Among those who do not expect promotion from the firm, many also stated that they did not want it:

"I would not like to take on any responsibility." - 080808, female seasonal worker with 20 years' seniority

"As a woman, being in charge would only bring problems." - 081203, female seasonal worker, 15 years' seniority

"Women can only be supervised by men." - 081306, female worker with 6 years' seniority

"I want to be like everyone else unless the manager chose me." - 081201, female worker with 22 years' seniority

264

"I am a seasonal worker: how could I get promotion?" - 080814, tipper,[2] 15 years' seniority

Yet two women said:

"With my seniority (15 years) I could be supervisor." - 080801, seasonal worker

"I would like to work in administration, as the hours are more convenient." - 081307, 5 years' seniority

Many women in Marrakech did not give a precise answer ("I don't know what job I could get promoted to") but one of them said:

"I don't know what else I could do but I hope I won't stay here for long." - 040209, seasonal worker, single, 18 years old

Wage Increases

For most workers, wage increases depend on the general increases decided by the government:

"Here workers earn the minimal wage (SMIG). If that increases, then our wages will increase." - 040116, female worker, 4 years' seniority

Some indicate that seniority in the firm or permanent status are conditions for wage increases:

"Senior workers get 5 to 10 percent more than the minimal wage." - 080805, seasonal worker, 20 years' seniority

Thus, even if they state that there is a possibility for a wage increase, this is more dependant on social laws governing minimal wages than on an internal promotion policy of the firm.

It was further revealed that little was known of salaries paid by the firm to the personnel on the whole.

Promotion or wage increases for unqualified workers are not common practices in the sector, where labor is mostly seasonal. Of course, a promotion policy within the firm could be a motivation for higher productivity, but the lack of such a system does not seem to affect workers who appear convinced that, with their level of training, it is difficult to obtain a better job.

Working Conditions

Working conditions are an important factor for productivity. We chose to examine four aspects which were not sufficiently developed in the quantitative survey, that is: transportation of personnel, canteens, breaks allowed and the reemployment of seasonal workers after a sick leave.

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[2] An employee whose job it is to empty crates of raw material onto the production line.

TABLE 26

WHAT DISTANCE DO YOU COVER DAILY TO REACH YOUR WORK PLACE?
(N = 31 workers)

Distance	Marrakech		Agadir		Total
	M	F	M	F	
0.5 to 3.4 km	1	8	2	11	22
3.5 to 6 km	-	1	-	-	1
more than 6 km	1	2	1	4	8
Total	2	11	3	15	31

Transportation of Personnel. Workers in the sector studied often live close to their place of work: 22 out of 31 cases interviewed live less than 3 km from the factories or stations. So, apart from a few exceptions, workers walk to work which generally requires a 15 to 30 minute walk (one way). This costs nothing and according to them, it is not tiring except at the end of the working day.

For male workers, 3 out of 5 cases interviewed cover the distance from home to factory or station on a motorcycle or bicycle and the other 2 walk ("I live near the factory, half a kilometer from here," 081210, worker). For those who travel by motorcycle, the cost is approximately 1 DH/km. Those who live a long way from their place of work, take the bus or benefit from the firm's personnel transportation (only one firm, 0813, out of the 5 interviewed, offer this service to their personnel. This firm is located in a semi-rural area and the majority of its workers live 15 to 30 km away). The few workers who travel by bus spend between 3 and 5 DH/day (return) except for one worker in Marrakech, 040123, who stated that she spends 7.5 DH/day for one hour of transport (8 km one way).

Thus, as is shown in Table 27, for the majority of workers transportation from home to work place is not a constraint on productivity.

TABLE 27

DO TRANSPORTATION PROBLEMS PREVENT YOU FROM DOING YOUR JOB PROPERLY?
(N = 31 workers)

	Marrakech		Agadir		Total
	M	F	M	F	
YES	-	3	-	3	6
NO	2	8	3	12	25
Total	2	11	3	15	31

266

Canteen Facilities. No canteen is available for workers in any of the firms investigated. However, the problem is different in Agadir and in Marrakech. In Agadir, one of the stations chosen (0813) is located in a semi-rural area 15 km from the nearest urban development (Ait Melloul). It offers facilities for preparing lunch: a building available to the workers so that they can cook lunch. So, at noon, men and women are busy cooking, separately. Often, the women organize themselves in groups and take turns to cook for the others. Workers in the other two stations in Agadir go home for lunch, as they mostly live in quarters developed around the stations (main employment center in the zone).

In Marrakech, workers either go home to eat, those who live within a km of the factory, or eat just outside the factory, because with the time needed for transportation, the lunch break is not sufficient to enable them to go home. As it is an important urban center, the distances covered require a lot of time.

In this context, workers in the two regions react differently to the idea of creating a canteen for workers in the work place, as is shown by the following table.

TABLE 28

WOULD YOU LIKE TO HAVE CANTEEN FACILITIES AVAILABLE AT YOUR WORK PLACE?
(N = 31)

	Marrakech		Agadir		Total
	M	F	M	F	
YES	1	9	2	3	15
NO	1	2	1	12	16
Total	2	11	3	15	31

Unlike workers in Agadir, the majority of workers interviewed in Marrakech are in favor of the installation of canteen facilities in factories:

"During the peak of the season at the factory, I do not have enough time to go home for lunch. I eat in the street, outside the factory." - 040112, female worker who has a 30 minute walk (one way) to get to work

"It would be ideal for me, to avoid eating in the street, as I cannot afford the bus to go home at lunchtime." - 040218, female worker with 1 years' seniority

Those who replied affirmatively in Agadir also express themselves similarly:

"I do not have time at lunchtime to prepare something to eat. With a canteen here, it would take less time and I would have more time to rest a little." - 081301, 5 years' seniority

The reasons given by those opposed to a canteen in the factory or station, other than the fact that they live close by, are cited below:

"I prefer eating at home. But if the meals were not expensive, it would be good to have a canteen." - 040106, male worker, who has a one-hour bicycle ride home (one way)

"A canteen would be expensive and I would not be sure of the quality of the food." - 081307, female worker, who comes in the firm's truck

"In any case, I prepare lunch for my family. So, there is no point spending twice." - 040116, female worker, widow, 6 children

It is obvious that the need for a factory canteen is a more urgent problem in Marrakech than in Agadir. The facility offered by this service would probably have a positive effect on worker productivity. The main reticence remains the cost of a meal.

Breaks. The lunch break is the main break of the day. It usually lasts 1h30 except in two cases where it is 1 hour: at the station 0813 where workers eat inside the production unit and in the factory 0402 which allows a second break of half an hour in the day.

In general, no other work break is allowed during the day, unless the day is extended to more than 10 hours due to a high tonnage of raw material to be handled. In this case, a second break of 30 to 45 minutes, is allowed towards the end of the afternoon:

"When we have to stay until late in the evening, we have a 45 minute break for dinner." - 080809, female worker, 6 years' seniority

The limited number of breaks seems insufficient given the undivided attention required of workers who have to sort and package goods. In this kind of work, if workers are tired, then sorting of fruit, vegetables and flowers can suffer and thus the quality and homogeneity of exported produce is not guaranteed, in which case they will not be saleable on foreign markets.

The same is true, moreover, for workers employed in other tasks just as critical for the commercial success of stations and factories: weighing, paletting, transport, control and repair of machines and equipment, canning, etc.

The effect of these long working days on worker productivity is perhaps negative but it needs to be measured by a strict control of the quality of products processed or packaged. However, this is not the aim of this study and we cannot discuss this. On the contrary, as far as workers' appreciation of the break system enforced in factories and stations is concerned, our survey revealed that the majority are satisfied and only a few rare cases, 4 out of 31 interviewed, question the system.

Nevertheless, it should not be forgotten that many female workers emphasized the fatigue suff[illegible] in a long working day:

"I like this work. But, the late hours and long working days are very tiring." - 080802, female worker, 8 years' seniority

Moreover, both in factories in Marrakech and packing stations in Agadir, the system of breaks applies to all workers without any distinction between gender; the only exception is the administrative and management staff who have a different system of breaks:

"Management and administrators' work is organized differently to that of workers: they have a 2-hour lunch break." - 080811, supervisor

"As well as my 2-hour lunch break, if work goes on late, I have an hour's break for dinner." - 081309, supervisor

Re-employment of (Seasonal) Workers After a Sick Leave. In all the firms interviewed, seasonal workers were re-employed after a sick leave.

Even though the status of seasonal worker indicates a certain precariousness in the employment of these workers, it is clear that employers prefer to keep a more or less stable labor force. The absence of any legal obligation to re-employ a seasonal worker is counterbalanced by the need to rely on experienced and known workers. Moreover, workers are conscious of this:

"After a sick leave, they take me on again because I am used to working here. The manager knows me." - 040217, female seasonal worker, 4 years' seniority

"I have been here a long time and they know that I am reliable." - 080814, tipper, 15 years' seniority

"I am only ever absent when I am sick. That can happen to anybody." - 081306, female seasonal worker, 6 years' seniority

In some firms, particularly in Agadir, there are some formalities to follow:

"In case of sickness, I let my superior know, and I ask for a few days off." - 080801, female seasonal worker, 15 years' seniority

"I have to have permission to be absent, otherwise I have to bring a doctor's certificate." - 080809, female seasonal worker, 6 years' seniority

"I have to bring justification." - 081204, female seasonal worker, 15 years' seniority

This possibility of re-employment after sick leave is a measure of job security for seasonal workers who normally have no legal guarantee of keeping their job.

This aspect of the survey emphasizes the complexity of the situation for seasonal workers in the sector studied. Effectively, these seasonal workers are often attached to the firms which employ them; their stability is a sign of experience and qualification of workers and which has a positive effect on work performance for these firms.

Allowances for Transport, Housing, and Food. No workers interviewed in any firm indicated that they received any allowances for transport, housing or food.

Conclusion

The survey on working conditions of personnel in post-harvest horticultural firms revealed that, in general, they were not favorable to workers. Nevertheless, workers do not necessarily perceive these conditions as negative: they are more dissatisfied with the incentive system (bonuses) which is poor or not generalized. Some workers, particularly in Marrakech, would like to benefit from a factory canteen, a service which is presently non-existent. On the other hand, they do not seem to be generally affected by the lack of a personnel transportation system or the daily break system presently enforced. Similarly, they seem resigned in the face of difficulty in obtaining promotion, even though the strongest desire of the majority of seasonal workers is to become permanent.

As far as wage increases are concerned, they do not expect them except in the case of a general increase in salaries; however, for them, a wage increase is necessary and the surest way of encouraging them.

In general, apart from bonuses, they do not believe that the working conditions affect productivity. However, for some women, the long working days and the lack of work breaks create fatigue and are prejudicial to their work.

On the other hand, many workers indicated that the good understanding between colleagues and a good relationship with supervisors are essential to good performance.

ATTITUDES OF DIRECTORS TO PRODUCTIVITY

Productivity/performance of the labor force is perceived as an important factor in the success of the firm by all directors with the exception of the head of the station 0812 who believes this factor is not important as labor is available on the employment market. This exception is difficult to explain as the station 0812 is not highly mechanized and depends enormously on labor.

We can conclude that all directors are aware of the importance of worker performance because the contribution of labor is essential to meet the requirements in quality and quantity of goods handled and exported.

Two groups of directors can be distinguished as far as satisfaction with worker performance is concerned: the Agadir stations whose directors are completely satisfied given the small proportion of losses by a labor force which is generally experienced, and the Marrakech factories whose directors are only partially satisfied due to the lack of professional conscientiousness of workers and their heterogenous level of training.

As far as the main factors allowing an increase in worker performance are concerned, those responsible emphasized the age factor and good human relations among workers, on the one hand, and between workers and deciders, on the other hand. Employers prefer young workers who are often educated, productive, capable of understanding and executing orders given by superiors to older workers who are less communicative and often illiterate.

The desire to improve performance/productivity of workers entails a better training system allowing the worker to be directly implicated in the production system. The organization of work by activity and an increase in young employees are also factors which should be taken into account for improved productivity.

In the eyes of company directors, a profitable worker is one who fulfills the following three main criteria:

- Professional conscientiousness
- Professional experience
- Professional capability

As to the evaluation of worker performance, we can conclude that no production quotas for labor exist in any of the firms studied, although one firm (0401) stated that it had drawn up production quotas but was unable to enumerate them.

Although it is difficult to evaluate worker performance, this factor is controlled by all firms in the form of a collective control generally carried out by foremen.

Even though individual supervision is judged difficult, given the nature of production line work and the large numbers of workers, it should be noted that in time, foremen can differentiate between productive and non-productive workers.

In general, performance is controlled directly by supervisors and indirectly by the quality and quantity of finished goods at the end of the line: number of goods handled during the day.

We can explain the difficulty of evaluating worker performance by the lack of any production norms per worker as confirmed in the questionnaires to directors.

Losses of raw material and other provisions due to bad handling or negligence on the part of workers affects all firms and is a proportion of general losses which are judged small and insignificant. Only one firm estimated its losses in packing cases and labels as higher than those of raw materials. Effectively, for each packing case lost, the company pays 6.5 to 8.5 DH as well as fines due to non-respect of temporary import of boxes.

All firms claimed to have installed a system of incentives to improve worker performance. However, workers who are aware of the positive role of incentives, declare that the present level of incentives is too low to incite improved productivity.

These incentives are often in the form of bonuses. Some firms also give their employees gifts of processed goods.

The results of the survey bring out two kinds of firms. Those which have opted for individual incentives, and those which give collective incentives. In reality, there are only individual incentives, because in the former case only productive workers benefit from bonuses and in the latter case all workers benefit but the amount of bonuses depends on seniority and evaluation of their performance by superiors (although precisely how performance is evaluated is not clear).

CONCLUSIONS AND RECOMMENDATIONS

The objective of the case study is to analyze factors affecting employment and productivity of workers in the post-harvest horticultural export sector. More precisely, it aims to define workers' perception of motivational factors and productivity and employment constraints due both to their personal and family circumstances and the worker-employer relationship. The impact of employment on the life of workers, particularly female workers employed in this sector, is an important part of this study.

The study concerns twenty-six female workers and five male workers, mainly non-qualified seasonal employees, five supervisors and five directors. For this purpose two processing units for horticultural produce (olives, spices and apricots) in Marrakech were selected and three packing stations for early vegetables in Agadir.

Main Results and Conclusions

Due to the importance of manual tasks in Moroccan processing and packaging industries for exportable horticultural produce, labor constitutes one of the most important production factors. These industries attract many workers native of the area where the firms are installed or from other areas.

The migrant labor force in the post-harvest horticultural sector is, nevertheless, no threat to the stability of personnel in these firms. These migrants come from regions where there is little possibility of finding a paid job and they do not intend returning there. Despite their status as seasonal workers, they are "used to" working in the firm which employs them and return each year at the beginning of the season. These workers stated: "There was nothing to do in the village," "You cannot earn a living with dry land agriculture."

The female labor force, chosen for tasks requiring care and handling delicate products (tomatoes, flowers, olives, apricots), consists mainly of unmarried women (single, widows, divorcees). These women, who come from modest backgrounds, indicate that the fact that they are alone led them to seek employment. However, in the event that they would marry, half of this group of women, particularly young single women, believed that their present job was incompatible with the role of housewife ("The man should take care of me," "This work is too tiring"). Marriage is not always considered an obstacle to remaining employed ("Mutual aid in a couple is a positive thing," "If the husband's financial situation requires it, I would continue to work," "The cost of living is high").

For women with young children, finding day care does not constitute a constraint [illegible] sister, mother or eldest daughter will look after the children. For most women interviewed, [illegible], 2 or 3 children "is enough," "With my salary, I can barely feed them"; we also noted a special interest in methods of contraception.

For male and female employees in the sector studied, their employment is of great financial importance at home. Financial dependance of family members is very high: our survey shows that 2 out of 3 family members of female workers do not earn any income; in the case of male workers interviewed, 4 out of 5 members of the family are financially dependant (at school or unemployed).

Many female wor[illegible] aware of the important financial role they play in their family. This role puts them in an advantageous position in family relationships and within their social circle. This is revealed in their part in making family decisions ("I earned this money and I decide how it should be

spent," "My parents are old and I decide for them") and in relief from some household duties ("I sometimes work 14 hours a day, my daughter helps me with domestic chores"). Similarly, thanks to their status as wage-earners, these women have a new level of personal freedom. It should also be noted that this employment is well considered by neighbors and close friends and for some female workers (divorcees), it offers them a certain degree of social acceptance.

Nevertheless, their attachment to tradition ("It's up to the man to provide") or the laboriousness of their work (long working days, the standing position, few breaks, irregular hours) or both of these factors, mean that, despite the advantages of being a wage-earner, some women aspire to the role of full-time housewife.

There is a marked sexual segregation in labor. Female employees are often devoted to manual tasks of sorting, grading and packing. Male and female employees admit that women have an inborn intuition for this work. Further, even if it is acceptable for women to have access to management positions in the firm, through specialized training, it is also voluntarily admitted that women are not made for handling heavy goods or for supervising personnel: "It's a man's job because they are more authoritarian," "They know how to enforce orders." As attribution of labor by gender is accepted by employees, the present division of tasks does not appear to have a negative impact on productivity. Further, employees are against mixing male and female workers on the same production line.

The definition of work performance is extremely varied: sometimes quantitative and sometimes qualitative. The means for measuring performance used by our interviewees are diverse (number of crates or working hours, satisfaction of superiors). The criteria for judging performance of the group of workers are often speed and experience. Supervisors find it difficult to distinguish between individual performances on a production line although, with time, they can distinguish good and bad workers: those who are quick and do a quality job; these two criteria are, moreover, linked to length of time employed in the firm.

As far as worker motivation is concerned, two factors emerge from our survey: the need to earn a wage and a good atmosphere at work: "The employers are good", "Good relationships with colleagues mean that time goes by very quickly." It should also be noted that given the low or non-existent level of schooling of these workers, particularly female employees, they have little chance of finding employment elsewhere for a similar wage to that paid by this sector, which motivates their attachment to their present employer.

Also, most employees would prefer cash incentives (bonuses) but there is also a desire for recognition of a job well done. Moreover, an important proportion of workers prefer collective incentives.

Working conditions are often difficult for male and female employees in packing stations and factories: the bonus system is not used everywhere, the possibility of promotion (sometimes expressed by a change of status from seasonal to permanent employee) is practically non-existent, breaks allowed during the working day are insufficient, personnel transportation, canteen facilities and training courses are rarely available in most firms.

However, for the male and female workers interviewed, the main productivity constraints are firstly personal and secondly professional. For them, working conditions are difficult but do not prevent them from working although tiredness (mentioned by female employees) and small or no bonuses are often cited as productivity constraints.

In fact, employees respect their working hours and are rarely absent except for family or medical reasons. Besides, directors of firms interviewed in Agadir are satisfied with the labor force, but in Marrakech they were less enthusiastic.

The importance of labor accomplished by female employees is recognized: "No machine can replace female employees". Seasonal employees are, however, in a precarious situation even though the firm will re-employ them after a sick leave.

The effect of working conditions on productivity remains to be determined according to the product processed or packaged, the position held, and the degree of mechanization of the firm. Nevertheless, employees' perception is not negative as for them it is essentially a question of remaining employed. But, in general, working conditions require special attention from management; at the present time, worker motivation by these means is virtually non-existent.

Recommendations

On the basis of the results of the qualitative study, we propose the following ideas:

1. The improvement of employee performance, which is essential to the competitiveness of firms, must take into account the following factors:

   a) The need to establish sectorial norms for employee productivity and criteria to gauge and evaluate work performance in the post-harvest horticultural sector.

   b) Worker productivity is linked to technical factors (quality of raw material, adjustment of machinery, speed of the production line, control posts along the processing line) and socio-economical factors (worker motivation, personal and family constraints).

      Initiate multi-disciplinary studies in order to establish productivity parameters (both qualitative and quantitative) and the impact of different factors on the improvement of worker performance.

      These studies should distinguish between post-harvest activities, processed and finished products, different jobs and the degree of mechanization of firms.

      If one product was studied in detail, this would allow a closer analysis by introducing factors such as regional differences, different levels of investment, the effect of combining certain ranges of products on the factory and employment, etc.

   c) The introduction of individual control methods of worker performance on the production line in order to introduce a system of rewards adapted to various levels of performance. Such individual rewards, in the form of bonuses or wage increases, could be an important motivation for workers.

      Further studies should analyze the means of introducing individual control methods to firms.

2. The main motivation of employees is to remain in their present employment. This attachment to the firm masks the effect of difficult working conditions and they do not clearly perceive their effect on productivity. So, very detailed studies should be carried out on this aspect as the improvement of working conditions would most probably lead to an improvement in performance.

3. As a large proportion of employees in the post-harvest horticultural sector are women, specific studies should be undertaken to explore the relationship between workers and the firm which employs them. Also, programs geared to improving their home and working conditions (family planning, day care facilities, improved scheduling of work, canteen facilities within the firm, respect for sex distinction) will be of great importance to their personal and professional life.

4. Training and recycling of personnel for their jobs is of capital importance to guarantee quality labor facilitating entry into international markets. This training, which can be done inside the firm by specialized technicians or faculty members, should include a general presentation of the different markets and the quality requirements imposed: respect of grades, color, aspect, phytosanitary residues, labels corresponding to contents, percentage of deviation allowed, as well as penalties for non-conformity to these requirements.

5. Particular attention should be paid to the long working days. Tiredness can affect the quality of goods processed or packaged with disastrous commercial consequences. One solution could be the establishment of teams working 8 to 10 hours a day. However, this will involve setting up a personnel management system involving a program for training personnel managers. This will require studies at all levels concerned. It should also be pointed out that limiting the daily working hours may not suit workers who prefer to work overtime.

6. During the interviews, many directors showed interest in the results of this study, particularly in certain aspects of organization of labor which they judged useful for improving performance. Thus, the publicizing of these results through seminars or brochures addressed to company management could be welcomed in the profession.

7. Many seasonal workers return each year to the same firm. In fact, it is a permanent labor force whose status as seasonal employees denies them access to certain social advantages. Their precarious situation is one of the major constraints of workers as well as for firms who could lose an experienced labor force. Further studies should evaluate the social and economic costs of maintaining this situation and the different means of improving it (establishing "return bonuses" for seasonal workers who come back, the possibility for some categories of workers to change their status from seasonal to permanent employees).

8. On a methodological level, thought should be given to the following:

   a) Sample size: for the quantitative survey, we used a large sample of workers which was useful to determine demographic trends of employees of firms in the sector studied. Nevertheless, this meant that the number of "open" questions or opinions contained in the questionnaires had to be limited, given the time required to collect these opinions and analyze them. It should be noted that analysis of qualitative data must be done manually, at least at first, in order to classify the different opinions expressed, and this can take a long time if the sample is large.

   b) The whole study covered seven regions of Morocco. Taking into account the seasonal timetable of firms in the sector, the only way to complete the survey on time was to use

local teams of male and female interviewers who worked simultaneously. This method not only gained time but also cost less as travel expenses were reduced. The disadvantage is that this method requires extensive management and administration, given the number of people involved (we used thirty interviewers and seven regional coordinators). Moreover, a well-elaborated training course based on field experience (pre-survey) should be organized to ensure that all the questions have been understood, and to explain the objectives of the study to interviewers and coordinators.

In other circumstances, it would be preferable to limit the region(s) covered in the study. It is also important to choose staff who have some experience in the subject under study.

c) The number of variables to be studied should be limited. The survey which we have just completed gives an overall view of the problem but, in the future, studies should be targeted to study certain aspects in more depth.

d) Categories of workers to be investigated should be defined beforehand, as, in the field, each firm has its own organization and definition of jobs.

Concerning the division of workers by job, it should be noted that in packing and processing units there are more than thirty different tasks, depending on the size of the firm. Thus, it was noted that in large firms employing more than 200 workers, the number of technical and administrative staff was proportionately larger than in small and medium-sized firms.

Moreover, some jobs involve more than half the workers (e.g. female workers in charge of sorting, grading and packaging) whereas other jobs involve only one or two people (e.g. machinery technician). Therefore, it should be clear what the objectives of the study are and whether all different jobs will be investigated, this can involve a large sample within a single firm.

Furthermore, employment and productivity constraints and motivations are not the same for all categories of workers and jobs and they should be treated differently.

e) Computer analysis of data can be lengthy and requires a lot of personnel if the number of factors studied and the sample are large. The timetable for the study should take these requirements into consideration in order to avoid errors in the timing allocated to each stage of the study. It should also be noted that a certain number of computers must be available so that several people can work simultaneously, this implies substantial financial support.

f) It is essential to use questionnaires adapted to computer analysis in order to facilitate the transcription of data; the disadvantage is that it does limit the use of "open" questions.

g) A system for correcting transcription errors should be envisaged (see Main Report for the method used in this survey). Even with well-trained personnel, errors can occur and affect the results obtained.

Moroccan Agribusiness Employment Survey Project
Final Report

GENDER AND EMPLOYMENT IN MOROCCAN AGRIBUSINESS

VOLUME V

RESEARCH DESIGN AND METHODOLOGY

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GENESYS

277

TABLE OF CONTENTS

	Page
CHAPTER ONE	
OVERVIEW OF SOCIO-ECONOMY, AGRO-INDUSTRIAL SECTOR, AND EMPLOYMENT	1
INTRODUCTION	1
ECONOMIC INDICATORS	1
FAVORABLE POLICIES TOWARD AGRICULTURAL GROWTH AND EXPORTS	3
IMPORTANCE OF HORTICULTURAL EXPORT AGRICULTURAL SUBSECTOR	4
EMPLOYMENT CONCERNS FOR DEVELOPMENT OF SUBSECTOR	5
UNITED STATES LEGISLATION AFFECTING EXPORT PROMOTION ASSISTANCE	7
MOROCCO'S LABOR LAWS	7
Minimum Wages (SMIG and SMAG)	8
SUMMARY: STUDY RELATION TO MOROCCAN SOCIO-ECONOMIC CHANGE	9
CHAPTER TWO	
RESEARCH DESIGN	11
INTRODUCTION	11
PURPOSE AND OBJECTIVES	11
Purpose	11
Objectives	11
KEY EMPHASES	12
Selection of Post-Harvest Horticultural Units	12
Selection of Employment and Productivity Factors	13
Levels of Analyses	13
Focus of Study	13
RELATION TO THE MOROCCAN AGRIBUSINESS PROMOTION PROJECT (MAPP)	14
ORGANIZATION OF RESEARCH	16
GENESYS Study Team	17
National Study Team (IAV)	17
INSTITUTIONAL SUPPORT	18
SUMMARY	19
CHAPTER THREE	
RESEARCH METHODOLOGY	21
INTRODUCTION	21
GUIDING HYPOTHESES FOR STUDY	21
SURVEY METHODOLOGY	21
CASE STUDY OF EMPLOYMENT AND PRODUCTIVITY ISSUES	24
DATA COLLECTION	24
Study Schedule	25
Survey Data Preparation and Analysis	29
SUMMARY	29

CHAPTER FOUR
SUMMARY AND CONCLUSIONS 31

ANNEX A: A GUIDE FOR INVESTORS: OFFICE FOR INDUSTRIAL DEVELOPMENT; MOROCCO'S LABOR LAWS A-1

ANNEX B: MAES PROJECT RATING FORM FOR SUB-CONTRACT COMPETITION B-1

ANNEX C: SAMPLING METHODOLOGY FOR FIRM NUMBER, TYPE, AND REGIONAL CLASSIFICATION C-1

ANNEX D: TRAINING PROGRAM BRIEF FOR FIELD PERSONNEL FOR FIRM AND EMPLOYEE SURVEYS D-1

ANNEX E: SURVEY CALENDAR FOR FIRM AND EMPLOYEE SURVEYS E-1

ANNEX F: METHODOLOGY USED TO CHECK DATA SET: ENTERPRISE LEVEL F-1

ANNEX G: QUESTIONNAIRES: ENTERPRISE, EMPLOYEE, AND CASE STUDY G-1

ANNEX H: FIRM CLASSIFICATION AND MAJOR PRODUCTS HANDLED IN POST-HARVEST ACTIVITIES H-1

LIST OF TABLES

Table		Page
1	Moroccan Agricultural Exports	5
2	Post-Harvest Horticultural Firms Interviewed by Region and Principal Activity	23
3	Proposed and Revised Study and Task Schedule	26
4	Summary of Firm and Employee Interviews in Morocco Agribusiness Employment Survey	29

CHAPTER ONE

OVERVIEW OF SOCIO-ECONOMY, AGRO-INDUSTRIAL SECTOR, AND EMPLOYMENT

INTRODUCTION

Morocco has made significant improvements in the last 20 years in all social indicators. Stymieing further social and economic improvements has been rapid growth of population (now about 2.5 percent) and doubling of the population in 27 years (1960-1987) from 11.6 to 26.5 million. For example, life expectancy has risen to 62 years, the child death rate has fallen to 20 per thousand and the infant mortality fallen to 57.4 per thousand (1992).[1] Primary education enrollment is steadily increasing with about 2.5 million students reported enrolled in public primary education in 1991 compared to 2.149 million in 1986.[2] Female illiteracy, although twice as high as that of males, was 78 percent in 1985 and is declining, as evidenced by an annual reduction of 1 percent between 1970-1985[3]. The total illiteracy rate (60 percent) nevertheless remains high for a middle-income country. Poverty and inequalities persist. The aggregate poverty rate remains about 30 percent, one of the highest in the Middle East and North Africa; rural poverty is higher (32 percent) than in urban areas (28 percent); and the ratio of the share of wealthier 20 percent of households to the share of the poorest 20 percent is 9:1 in urban areas and 7:1 in rural areas.[4] Approximately 250,000 workers per year, many poor and with minimal education, will thus need to be absorbed into the labor force due to Morocco's growth rate — a factor that suggests a strong push toward further industrialization and a need to redress insufficient nonfarm employment opportunities in rural areas for young men and women.[5]

ECONOMIC INDICATORS

A two-way relation exists between economic growth and social change. Although Morocco's economy underwent rapid changes since independence, Gross Domestic Product (GDP) growth has fluctu-

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[1] Demographic and Health Survey in Morocco, 1992 (ENPS). Infant mortality rate was 73.3 per thousand in 1987 (National Survey of Family Planning, Fecundity, and Health in Morocco, 1987).

[2] Royaume du Maroc, Ministère des Affaires Economiques et Sociales, Direction de la Statistique, Annuaire Statistique du Maroc 1992, p.6.

[3] Jazairy,I., Mohiuddin Alamgir, Theresa Panuccio, The State of World Rural Poverty. Table 21, p.449. New York University Press for IFAD, 1992.

[4] World Bank. Morocco. Reaching the Disadvantaged: Social Expenditure Priorities in the 1990's. No. 7903-Mor. September 10, 1990

[5] USDA/FAS. Moroccan Agricultural Situation. July 1992, p.6.

ated widely over the period in part due to exogenous developments.[6] GDP growth average was 1.65 percent between 1974-84, 9.96 percent in 1988, 5.12 percent in 1991 and forecast for 1992 at -3.0 percent.[7] Classified as a middle-income country, GDP per capita in current dollars increased from $504 (1985) to $907 (1988) to $1020 (1991).[8] The inflation rate, low by most developing country standards, has increased since 1988 and 1989, when it was 2.3 percent and 3.1 percent, respectively, to 8.2 percent in 1991 and forecast to 5.0 percent for 1992. Since 1983, Morocco has implemented a program of structural adjustment to improve growth, reduce unemployment, increase productivity and efficiency, and stimulate private sector development. Structural adjustment's effects on social issues need to be assessed.

The structure of the economy shifted increasingly toward manufacturing while the share of agriculture has followed usual trends for middle-income countries. The index of industrial production in processing industries indicates that the greatest changes in transformation industries in 1991 occurred in industries producing material for offices (*matériel de bureau, de mesure, optique, horlogerie*) 175.4, followed by mining equipment (*produits issus de transformation de minéraux de carrières*) 171.7, and nontraditional manufacturing activities (*autres industries manufacturières*), 142. The industrial food product transformation index was 110.2. This index displays only a 3.8 percent increase from 1990 compared to 17.1 percent, 12.1 percent, and 1.1 percent, respectively.[9]

Total agricultural exports have dramatically increased from 8.7 billion dirhams in 1988 to 11.5 billion in 1991. Between 1987 and 1989 it comprised over 30 percent of the country's total exports; now exports with an agricultural base constitute about 25 percent of total export receipts.[10] Agricultural contribution to gross national product has declined from 23 percent in 1965 to 16 percent in 1989. The sector is known for its high growth rate during the eighties, 6.7 percent, approaching 2.8 percent in the industrial sector and 4.2 percent in the service sector.[11] About 40 percent of the labor force is also in agriculture or ancillary industries. Thus, the agricultural sector and its industries are critical to the development of the economy and for employment.

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[6] Included are persistent drought over 7 years, rapid rise in energy prices, tightening of Morocco's traditional export markets, softening the phosphate market, fiscal burden of military actions in the South. See Brendon Horton. Economic Policy Reform and Analysis: A Case Study of Morocco. World Bank.

[7] Tuluy, H. and B. Lynn Salinger, Trade, Exchange Rate and Agricultural Pricing Policies in Morocco. World Bank. 1989, p.9; USDA/FAS, op. cit. p.31.

[8] USDA/FAS. op. cit. p.6.

[9] Direction des Etudes de la Communication de la Banque Marocaine du Commerce Extérier (ed), Le Maroc en chiffres, p.52.

[10] Mouaffak, Seddik. "L'Agriculture Marocaine. Entre les contraintes de la libéralisation et les incertitudes de l'avenir" Le Liberal. September 1991, p.22.

[11] The rate of GNP was 4.1 percent during the same period according to the World Bank Report according to Mouaffak, Seddik. "L'Agriculture Marocaine. Entre les contraintes de la libéralisation et les incertitudes de l'avenir" Le Liberal. September 1991, p.22.

FAVORABLE POLICIES TOWARD AGRICULTURAL GROWTH AND EXPORTS

Development of the agricultural sector has been always a high priority to the Moroccan government. Since independence, the government has established the following objectives: development of natural resources, particularly water resources for irrigation; modernization and integration of agriculture with the overall economy; higher employment levels in the rural sector to reduce migration to urban centers; self-sufficiency in sugar and dairy, growth in the export market to generate foreign exchange.[12]

Recent focus places greater concern on assisting industries which are in private hands with export growth as a national policy. Economic policy changes to stimulate private sector growth also directly favor agricultural development and encourage export promotion of horticultural packaged and processed products by private firms. Among them include:

- Trade policy of *ad valorem* tariffs with output price protection accorded to producers of strategic commodities (under the medium-term sectoral adjustment reform program[13]);
- Opening export trade (for example, agricultural exports are no longer regulated, controlled, nor sold by the *Office de Commercialization et d'Exportation, OCE*), a state marketing board, 1987);
- Fostering foreign investment (for example, foreign investors can wholly or partially own Moroccan corporations, 1990); and
- Providing export incentives (for example, DH earned by exports can be converted to foreign exchange).

Morocco also continues to subsidize at varying degrees irrigation infrastructure (capital costs), water delivery (operations and maintenance), chemical fertilizers, agricultural credit, mechanized equipment acquisition, selected seeds, research and extension, and certain forms of transport for specified products.[14] Case studies demonstrate these latter agricultural policy decisions directly affecting production are captured by larger, generally irrigated or high rainfall zone farmers practicing commercial agriculture, and thus highly favor agro-processing and packaging industries of citrus, fruits and vegetables with lower product provision costs.[15]

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[12] Tuluy and Salinger, op. cit. p.45.

[13] Tuluy and Salinger. op. cit. p.2.

[14] Tuluy and Salinger, op. cit., p.72.

[15] Tuluy and Salinger, op. cit. p.45.

IMPORTANCE OF HORTICULTURAL EXPORT AGRICULTURAL SUBSECTOR

The agro-industrial sector occupies an enviable position within the processing and packaging industry because of employment, added value, and export turnover. According to the Ministry of Commerce and Industry (1989), agro-industrial units comprise approximately 27 percent of all industrial units (1,455 units), have an export turnover of US$ 496 million (16 percent of Morocco's industrial exports), employ 116,584 people, and provide more than US$ 1 billion (35 percent) of value added by all processing industries. The fruit, vegetables, meat, dairy, fish, feed, and spices and oil agro-industrial subsector, comprising 468 units (a third of the agro-industrial sector), offers 1,498 different products (43 percent of total exports), contributes US$ 458 million (92 percent of all agro-industrial exports), employs 96,499 persons (83 percent of persons working in the agro-industrial sector) and generates $301 million in value to products (29 percent of total value added by agro-industrial processing industries). About one quarter of the units have a turnover of over $2.4 million and account for 85 percent of total production. The fruit, vegetable, and fish processing sector offers about 11,000 full-time jobs and 46,000 part-time jobs (USDA/FAS, p.20). The Ministry of Commerce and Industry (1989) reports that 118 units engage in fruit and vegetable preservation, employ 40,305 employees, offer 333 different products, contribute US$ 255 million in exports, and comprise 51 percent of all agro-industrial sector exports. Nevertheless, agribusiness has underutilized capacity for generating employment, particularly for women and in cities.

The packaging industry for fresh fruit and vegetables as well as the cold chain for their export also contribute substantially to value earned from agricultural exports. In 1991 the fruit and vegetable, olive oil, spices, and essential oil sector represented 42 percent of all agricultural exports, an increase of 4 percent since 1989 (see Table 1). Fresh fruit and fresh vegetable value of exports increased more than canned fruits and vegetables during the same period (55 percent, 75 percent and 14 percent, respectively). Citrus and tomatoes, the major contributors to export earnings in the fresh fruit and fresh vegetable sectors, account for much of the overall value increase of 25 percent for agricultural exports between 1989-1991. In 1991, 685 metric tons of fresh fruit, which 99 percent was in citrus or 678.2 metric tons, were exported for a value of US$ 218 million. Out of 273.3 metric tons of fresh vegetables exported in the same year, 49 percent were tomatoes (133.7 metric tons) for a value of $54 million. This was 50 percent of export earnings from fresh vegetable export trade in 1991. Fresh tomato exports this year have been severely affected by EEC reference prices, global pricing, and limited markets outside the EEC but their totals will not be known until the full end of the season. (El Firdaws, "Débat sur les problèmes et perspectives des exportations agricoles marocaines", *Libération*, May 11, 1993, p.4). In Table 1 the large proportion of "other" exports includes fish and fish products.

The GOM with sound reason gives high priority to the horticultural export sector. Exports of citrus and off-season early vegetables or *primeurs* (such as tomatoes, potatoes, and onions) have become a dynamic part of the Morocco's agriculture even though exports have been deterred due to protectionism from the EEC, since Spain, Portugal and Greece's entry — particularly for clementines and tomatoes. IBRD, international agencies, and private organizations and banks as a result provide Moroccan companies assistance to penetrate new markets, consolidate already existing ones and diversify product lines.[16] While the priority is both economic and social, most assistance is economically oriented toward improving production or marketing, less toward improving employment conditions or worker productivity.

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[16] The World Bank completed an "Off-Season Vegetable Marketing Project" which provided $50 million from 1980 to 1987 and has been preparing new project activities for agribusiness promotion.

TABLE 1

MOROCCAN AGRICULTURAL EXPORTS: 1989-1991
(QTY: 000 Metric Tons, Value: Million US Dollars)

AGRICULTURAL EXPORT TYPE	1989		1990		1991		% Chg. 1989-1991	
	QTY	Value	QTY	Value	QTY	Value	QTY	Value
FRESH FRUIT	556	141	476	168	685	218	23	55
Citrus	552	138	473	165	678	209	23	51
FRESH VEG.	214	61	191	73	273	107	28	75
Tomatoes	104	34	120	46	134	54	29	59
Potatoes	99	21	60	18	126	41	27	95
PROCESSED VEG.	14	30	21	43	26	49	86	63
In brine	5	15	5	16	5	4	0	-73
Frozen	7	10	10	15	10	15	43	50
Dehydrated	2	5	7	12	12	20	500	300
CANNED FRUIT/VEG.	115	139	120	166	120	158	4	14
Citrus juice	35	47	35	49	32	33	-9	-30
Olives	41	43	47	54	51	60	24	40
Pickles	13	18	11	18	10	15	-23	-17
Apricots	14	12	14	19	17	20	21	67
Tomatoes	5	10	6	14	4	12	-20	20
Green beans	8	10	7	11	6	10	-25	0
SPICES,FLAVORING	14	11	15	14	17	17	21	55
ESSENTIAL OILS	1	4	1	5	0.4	5	-60	25
OLIVE OIL	*	1	30	40	3	5	*	400
OTHER		628		697		772		23
TOTAL AG EXPORTS		1014		1166		1326		31
% of AG EXPORTS		38		40		42		25

*: quantities less than 50 metric tons

SOURCE: USDA/FAS, "Moroccan Agricultural Situation", p. 29, 1991; p. 33, 1992.

EMPLOYMENT CONCERNS FOR DEVELOPMENT OF SUBSECTOR

The Moroccan economy is growing but it must grow more to keep up with population growth. Morocco's labor force of 10 million (eight million men, two million women) accounts for 39 percent of the population. In 1991 the total number of persons employed (defined as persons 7 years or older who

declare themselves engaged in some employment either within 24 hours before interview or 30 days before date of interview) was 2,590,862 for urban males and 809,051 for urban females.[17]

Employment is a major problem for women and in cities. Unemployment is a growing problem, particularly in urban areas. Declining agricultural profitability, drought and seasonal underemployment exacerbate the flow of immigrants to cities. The number of unemployed, estimated at 1.1 million (12 percent, a national average) is officially reported as high as 695,480 persons or 17.3 percent in urban areas for those 15 years and older. The rate of urban unemployment in 1991 is officially one and one-half times higher for females than males (23,3 percent and 15.3 percent, respectively) with rates as high as 35.3 percent for urban females and 31.3 percent for urban males between 15 and 24 years old.[18]

Low cost labor is one determinant of Moroccan companies' competitive advantage in the global market place of fresh agricultural produce and preserved fruits and vegetables (Sullivan, 1991). Employees in the post harvest agro-enterprises rather than those employed in ancillary agricultural activities are likely to be the most significantly affected by Moroccan export-oriented industrialization models based on trade liberalization, stimulation of foreign investment and trade, private sector promotion and promotion of new technologies. Because of its strategic employment potential and income potential, the sustainability of the horticultural export-oriented agricultural sector — unlike most other industrial sectors — will have positive affects on employment opportunities for men and women in both rural as well as urban areas.

Agribusiness development can be affected by both a shortage of skilled educated labor and under utilized capacity for generating employment. In the past a labor shortage hampered the development of exports and of industries employing more complex technology (especially machinery and equipment). In 1975, for example, in establishments with 50 or more employees, some 45 percent of supervisory staff and 18 percent of foremen and technicians were foreigners and wide gaps existed between average annual wages of unskilled workers and supervisors.[19] Continued training efforts and education attainment of both men and women since 1975 no doubt have reduced the percent of foreigners. However, wage differentials by occupational position have not been since studied nor have national studies reviewed worker educational levels by occupational status. Using this study's employee survey data, the extent to which wage differences have been reduced can be illustrated as well as educational attainment levels affecting male and female skilled labor force participation. Provided below are the average 1975 wages of agro-food establishments with 50 or more employees (in thousands of DH per job per year; index = 1.0 for unskilled workers in parenthesis; US$ 1.00 = DH 3.970) by occupational position of employee.[20]

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[17] Direction de la Statistique, op. cit. p.353.

[18] Direction de la Statistique, op. cit., p. 355.

[19] World Bank. Morocco. Economic and Social Development Report. October 1981, p.185.

[20] World Bank. Morocco. Economic and Social Development Report. October 1981, p.185.

Post	Average Wages/Year	
Unskilled workers	5.5	(1.0)
Specialized workers	8.2	(1.5)
Skilled workers	12.4	(2.3)
Clerical workers	16.3	(3.0)
Foremen	24.5	(4.5)
Technicians	28.8	(5.2)
Supervisors	57.7	(10.5)

UNITED STATES LEGISLATION AFFECTING EXPORT PROMOTION ASSISTANCE

The initial guidelines for implementation of Section 599(C) of P.L. 102-391, The Foreign operations, Export Financing, and Related Programs Appropriations Act, 1993 prohibits use of appropriated funds for United States assistance which would contribute to violations of internationally recognized workers rights at the country, project and activity levels. These rights are defined in Section 502(A) (4) of the Trade Act of 1974 as: 1) right of association; 2) right to organize and bargain collectively; 3) prohibition on the use of any form of forced or compulsory labor; 4) minimum age for the employment of children; and 5) acceptable conditions of work with respect to minimum wages, hours of work, and occupational safety and health.

Labor conditions in beneficiary enterprises of USAID/Morocco development assistance to horticultural export promotion now must comply with basic human rights such as freedom of association, right to organize and bargain collectively, protection against forced labor and protection against discrimination. Otherwise financial and technical assistance must be withdrawn. Concerning working conditions and minimum wage compliance with ILO standards there is some flexibility. Hence, this study of employment working conditions takes on greater significance under the new US legislation since it is closely tied to MAPP assistance to the processing and packaging industries under study.

MOROCCO'S LABOR LAWS

Morocco's industrial labor laws set standards concerning working conditions, minimum wages, occupation health and safety, and minimum age for employment as well as basic human rights. Morocco's modern labor laws are based on the agreements and recommendations of the International Labor Office. Laws cover employment contracts, statutory working conditions, wages, working hours and paid leave, social security, labor relations, industrial injuries and occupational diseases, medicare, and labor inspection.[21] Of note, Moroccan law recognizes the worker's right to form unions to defend their occupational interests. A copy of the laws is found in Annex A.

[21] Kingdom of Morocco. Office for Industrial Development. Guide For Investors, p. 62-65.

Minimum Wages (SMIG and SMAG)

As of January 1, 1991, minimum wages are the following:[22]

The minimum wages for persons 18 years or older:

For industry and commerce:	DH	For agriculture:	DH
hourly wage	6	daily wage	31.08
daily wage (8 hrs/day)	48		
monthly wage (208hrs/month)	1248		

For workers below 18 years, salaries are reduced by the following percent:

For industry, commerce:		For agriculture:	
14-15 years	50%	12-15 years	50%
15-16 years	40%	15-18 years	30%
16-17 years	30%		
17-18 years	20%		

Wages are arranged between employer and employee but shall not be lower than the minimum wage for industry and commerce (SMIG) or the minimum wage for agriculture (SMAG) as noted above. In addition to wages, workers receive seniority bonuses with minimum percentage increase prescribed by law (see Annex A).

Social Security payment to the Caisse Nationale de Securite Sociale (CNSS) is rated at 10 percent of the total gross monthly wages earned by each wage worker. Employers are required to register their salaried workers and apprentices with the same CNSS.

With respect to health services, Moroccan industrial businesses employing more than 50 paid staffers are required to make suitable arrangement to provide medical services. When industrial activities may cause occupational diseases, business units of less than 50 employees are also required to provide medical services. Employers are required to cover the cost of such medical care.[23]

This study can help ascertain whether in the agro-food industries of processing and packaging there exist associations among workers, whether minimum wages are below the legal minimum for male and/or female workers, and whether some occupational health and safety conditions are applied.

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[22] Bulletin Officiel as cited in Annuaire Statistique du Maroc 1992, ibid. p.362.

[23] A Guide For Investors: Office for Industrial Development, "Morocco's Labor Laws," p.65

SUMMARY: STUDY RELATION TO MOROCCAN SOCIO-ECONOMIC CHANGE

Capacity utilization rates of the agro-industrial sector in specific targeted commodities are central to stimulating further Moroccan economic growth [24], expanding market entries, and reducing market access barriers, particularly to the EEC.[25] Improving supplies of raw materials, supply of skilled workers and securing nonviolation of internationally recognized workers rights are also crucial to determining impact of export promotion assistance on the economy and society. That 46 percent of Moroccan agricultural exports in 1991 were in seafood products not fruits and vegetables[26] suggests the horticultural sector has not realized its full export potential and more concerted efforts are needed to find alternative markets to the EEC. Because a large proportion of the labor force is unskilled and women, development assistance to the private sector industries in this export sector takes on added significance. Assistance which directly improves women's labor conditions and assistance which enables the sector to increase employment opportunities for women would benefit not only women as workers but also their abilities to provide social and economic opportunities for their children. Indeed, technical assistance is needed by the GOM and private industries to improve quality, packaging, competitiveness and communications; however, exogenous factors constrain entry into new markets (Sullivan, 1991). Moroccan company global market entry will not be easy to sustain due to the nature of global agribusiness (Floyd, 1991). The potential social and economic impact from private sector development offers a worthy challenge for which the GOM is fully committed.

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[24] Especially in the non-traditional agricultural export sector and fish processing industries. Traditional agricultural export commodities are citrus and tomatoes since the 1970's.

[25] There are expected to be far-reaching effects on agricultural commodity trade--particularly in fresh fruit and vegetables when the GATT negotiations — Uruguay Round are completed.

[26] USDA/FAS. Moroccan Agricultural Situation 1991, p.23.

CHAPTER TWO

RESEARCH DESIGN

INTRODUCTION

The Moroccan Agricultural Employment Survey (MAES), a one year $234,193 activity, is designed to respond to concerns expressed in the Social Soundness and other analyses carried out for the preparation of Moroccan Agri-business Promotion Project (MAPP)[27] which indicated that women make up a large percentage of the semi-skilled and unskilled labor in agribusiness firms and that to increase productivity of agribusiness firms, employment generation and factors influencing characteristics and productivity of men and women employees need to be tracked.

The study was co-funded by the Morocco USAID Mission and the Office of Women and Development, USAID/Washingtor, under the auspices of the GENESYS Project. The staff included two expatriate survey research and women in development specialists and a survey team from l'Institut Agronomique et Vétérinaire Hassan II (IAV). Data to look at employee characteristics and factors affecting employment generation and productivity were drawn from a survey of a sample of agribusiness firms and another of their employees. The two surveys were supplemented with 35 in-depth employee interviews to capture the impact of employment on the lives of workers, particularly women.

PURPOSE AND OBJECTIVES

The following section describes study purpose and objectives. Because of the multifaceted approach to the study, primary and secondary objectives are listed separately. Data analyses are carried out separately also to meet each secondary objective.

Purpose

This study examines institutional and employee characteristics affecting employment and productivity of male and female agribusiness employees in the post-harvest handling and processing industries of the horticultural export subsector.

Objectives

Its primary objective is to prepare baseline data on employment and employment related factors to enable the Government of Morocco (GOM) and USAID to assess the impact of agribusiness promotion

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[27] The Morocco Agribusiness Promotion Project (608-0210), a seven year US$20 million project is designed to directly assist the GOM and the private sector agribusiness produce, package, and market a wide variety of "demand-driven, value-added agricultural commodities." USAID awarded Development Alternatives, Inc (DAI) a completion-type contract for five years with the possibility of extension for up to 36 additional months to manage this project.

on employment generation and work performance, particularly on lower socio-economic groups, especially on women.

The secondary objectives are to:

- Describe organizational issues pivotal to the this subsector's post-harvest labor force and to the employment of women;
- Describe factors affecting worker productivity and employment that require attention or remedy in the post-handling phase of horticultural export promotion; and
- Discern impact of employment on person and household livelihood.

According to the Ministry of Commerce and Industry (1989), about 117,000 persons are employed in the agro-industry sector. The fruit, vegetable and fish processing sectors offer now about 11,000 full-time jobs and 46,000 part time jobs with nearly half of seasonal labor used by the processing industry employed in this subsector of agro-industry.[28] Efforts to assist export oriented agribusinesses are expected not only to have positive effect on stimulating the national economy but also to have potential impact on employment generation and on the likelihood of improving health and quality of life (education, income, security) of Moroccan agribusiness workers, particularly female workers.

KEY EMPHASES

Selection of Post-Harvest Horticultural Units

The MAES study examines institutional and employee characteristics affecting employment and productivity of male and female employees in the major types of post-harvest handling and processing industries of the horticultural export subsector. The post-harvest handling units in the study include processing, packing, and fruit and vegetable cold storage, because these activities employ large numbers of people. Less emphasis is placed on cold storage because the Ministry of Agriculture and Agrarian Reform (MARA) was engaged in a national study of cold storage at the time of this study.

The survey includes firms producing for both international and national markets in a number of commodity sectors, not firms exclusively engaged in export trade. Firms involved in the following commodities are included: fresh early season and seasonal vegetables (*primeurs*), fresh and frozen fruit, canned and processed fruits and vegetables, spices and condiments, olives and olive oil, and flowers. Firms include therefore the post-harvest handling processes of transforming, packaging, and cold storage. Excluded from study are fish, meat, and cereal products or other post-harvest handling activities such as transport.

[28] Ministry of Commerce and Industry, 1989. What constitutes an agro-industry unit is not clear and permanency of units is not readily fixed. In 1989, the Ministry of Commerce and Industry reported 1455 agro-industrial units which approximated 25 percent of all industrial units reported.

Selection of Employment and Productivity Factors

Data collected by questionnaires with both open and closed ended questions are used to draw profiles of employees in all positions and work statuses in sampled firms. Data examine firm industrial organization characteristics; productivity constraints; job and workplace conditions; access to health and social services; and indicators of worker productivity, worker performance, employment regularity, and labor recruitment methods. Employment data provide indicators of: employment conditions, productivity and performance indicators, training and skills needs, worker benefits and incentives, job security and advancement, access to health and other services, work performance and impact of work on person.

Levels of Analyses

Employment profiles are constructed at three levels so that organizational and employee characteristics and indicators of productivity and understanding of worker motivational factors can be understood. The levels include:

- Firm survey
- Employee survey
- Employee case study

Particular attention is paid to discerning gender-based constraints to employee motivation, and socio-economic factors affecting productivity or worker performance by gender. Perceptions of worker productivity and worker performance are discerned from workers and directors. Socio-economic factors selected for analysis are those more likely to affect permanent and seasonal unskilled employees than administrative or skilled employees. Case studies provide qualitative information and depict impact of employment on person and household livelihood, security, and opportunities. They enable the situation of the workers, particularly that of the unskilled female worker, to be featured and detailed.

Focus of Study

The study analyses the human resource development concerns of agribusiness employees and the institutional constraints affecting the employment structure of enterprises during the 1992-93 season.[29] A major limitation of this study is that small post-horticultural industrial units sampled are under represented when size is determined by number employed. Because of our concern for discerning employment characteristics, middle- or large-size firms were more represented than small firms. The following six points describe the parameters of the analysis:

- First, research is "applied" and of "manageable interest," that is, the focus is on variables and hypotheses that the firms and project activities under MAPP can influence or change. It does not include all institutional and structural factors or sector conditions likely to influence employment opportunities, benefits or worker performance. It looks at indicators which can be tracked, describes the situation of the workplace and discerns factors affecting employment and productivity.

[29] Production data and economic data are for the 1991-92 season.

- Second, it provides a socio-economic descriptive analysis of employees and of enterprises. It is specific to packing, cooling and processing activities. Transformation activities are key in determining quality, competitiveness and labor cost.

- Third, it covers the 1992-93 season for enterprises active between December 1992 and April 1993. Due to exogenous factors such as the drought, a later-than-expected start, and the "off year for olive production," this year's production may be lower than normal. Firm-level data, however, cover 1991-1992 production and should provide "normal" employment profiles for this baseline year.

- Fourth, it focuses on the transformation process of key commodity items and employment profiles at the units engaged in transformation. Indicators of security of product source and export trade are provided to illustrate impact of production and export trade on the transformation process. It does not provide profiles for each commodity item exported nor look at employment generation resulting from backward and forward linkages of the production cycle.

- Fifth, it measures productivity qualitatively by worker performance rather than productivity quantitatively by actual energy/output/time. Physical, material, social, organizational, and personal factors affect individual productivity in specific tasks. Individual worker production rates are affected by group productivity, collective performance, and the rhythm of machines set by technicians. Informal work group performance often acts as an intermediary affect on individual production rates. Each task has its own productivity measurement in terms of energy/output. Productivity, quantitatively measured, is thus best analyzed by a firm study or on a specific task basis. Due to the plethora of tasks and group situations included in this study, productivity is best indicated by global evaluative measures of worker performance.

- Sixth, labor absorption capacity of agro-industries is vulnerable to economic and political terms affecting expansion and export trade. It is also subject to the modifications expected in the restructuring of agriculture as they relate to the factors of production — particularly land, labor, mechanical and biochemical inputs — to be used in sustaining export-oriented agriculture. Improving export activities in horticultural processing and packaging industries is **expected but not guaranteed** to expand employment among the lower socio-economic status groups, particularly women. This study depicts that present employment situation.

RELATION TO THE MOROCCAN AGRIBUSINESS PROMOTION PROJECT (MAPP)

Employment opportunities and employee incomes are expected to grow as a result of MAPP. The volume and composition of the labor force is expected also to change as a result of changes in the technology mix of the industry.[30] This study contributes to in-depth employment baseline information for both evaluation and monitoring of MAPP, from a national survey randomly and representatively drawn from the post-harvest handling industries in processing and packaging. Effects on employment and worker productivity can be measured from this baseline study. "Periodic tracking" of specific information can be carried out to **assess** and to **monitor** whether employment opportunities and incomes

[30] DAI, Inc. Morocco Agribusiness Promotion Project Paper. Team Report. January 1991, p.74.

do grow as a result of project specific activities — particularly for women who now compose a large proportion of its unskilled seasonal labor force through the application of indicators selected from this study. Tracking can also measure whether employment related conditions like health and welfare **improve** rather than **worsen** as a result of horticultural export promotion.

This study is funded independently from MAPP. As a result, it differs both in design and methodology from other baseline studies under MAPP. The differences should not be distractions nor deterrents from the usefulness of the study findings and recommendations. Indeed, the research design was astutely prepared to ensure maximum usefulness of data for the MAPP. It was designed to supplement limited GOM in-depth data on employment in the post-handling processing and packaging industries.

The design of MAES complements MAPP in five ways: selection of commodity subsectors, placement of enterprise on export chain, representation of enterprises, broad-based nature of data, and concentration on women and level of labor force interviewed:

- **Selection of commodity subsectors.** Initial assistance under MAPP is targeted at eight commodity subsectors: fresh vegetables, fresh fruit, processed fruit and vegetables, spices and essential oils, olives, food legumes, cut flowers, and grapes, raisins, and wine. Major assistance is to be directed toward fruits and vegetables, olives and flowers. The monitoring components of the project are to make a special effort to document and quantify the evolution of employment in the priority sectors affected by the project.[31] Hence, this study is designed with proportionally representative samples of employees and firms within these commodity subsectors to give a detailed description and count of employment for the horticultural subsectors which probably use the largest amounts of labor: fresh fruits and vegetables, processed fruits and vegetables, and olives.

- **Placement of enterprise on export chain.** This study takes a "horizontal cut" rather than a "vertical approach" toward baseline employment data collection. Factors affecting worker employment and productivity at the production level are quantified by post and task activity. The MAPP project takes a vertical approach to improving exports of subsector commodities; yet the emphasis of MAPP assistance is directed more toward post-harvest handling industries than toward production. Given limited funding and time to carry out a multi-commodity, employment baseline during full agricultural production and processing calendar years, MAES development of employment baseline data in the processing and packaging (post-harvest) industries, where value added to exports is most critical and where MAPP will place greater technical assistance.

- **Representation of enterprises.** This national sample survey focuses on employment in the part of the vertical chain with representative sampling from key subsectors of interest. While enterprises were clustered by region to reduce data collection costs, clustering does not bias enterprise selection. The survey, carried out under the auspices of an IAV technical team, tapped technical resources from ORMVA and DPA personnel in sample areas to ensure representativeness. MAPP subsector baseline studies use data obtained from secondary sources or from specific-purpose surveys carried out by or in close cooperation with an agency or association that tracks the subsector of concern. The survey can provide MAPP with a data base from which to systematically draw specific-purpose surveys on

[31] DAI, Inc. Morocco Agribusiness Promotion Project Paper. Team Report. January 1991, p.74.

employment related issues and a means for continued association with IAV and MARA/ORMV for further employment impact and generation survey research.

- **Broad-based nature of data.** Data collected provide detail on employment and factors affecting worker performance and productivity from institutional *and* employee perspectives. MAPP includes an extensive monitoring and evaluation plan to track economic, socioeconomic, institutional and technological issues.[32] As a result of this study, periodic employment updates on **specific** factors can be carried out to track employment generation, gender factors affecting workers, and volume and composition of labor force. It also provides a vehicle by which workers, especially female workers, can participate in noting factors which they would want changed to improve their work performance since human resource strategies will take survey results into account in subsequent USAID planning of human resource development projects in private enterprises.

- **Concentration on women and on unskilled labor force.** Employees were sampled in all positions in order to look at factors affecting employment of women. In particular detailed questions regarding factors affecting female performance and employment due to reproductive roles and health factors were included. A major justification of support by USAID/Morocco and the GOM to MAPP is the expected contribution from horticultural export expansion on improving employment of men and women of lower socio-economic groups. Because Moroccan women demonstrate higher urban unemployment and greater illiteracy than males, they are disproportionately represented in the unskilled labor force of the agro-industrial sector. Originally selection of employees was to be weighted toward female employees in the unskilled labor force; however, the predominance of women in the unskilled labor force made this sampling procedure unnecessary to ensure gender be considered a variable in analyzing factors affecting employment and productivity of the unskilled labor force.

In summary, this study establishes a framework for documentation and development of benchmark indicators to quantify the evolution of employment and human resource development likely to occur due to MAPP initiatives and as a consequence of agribusiness investment in the horticultural processing and packaging industries. It is particularly important because it provides gender-specific indicators at the employee and institutional levels.

ORGANIZATION OF RESEARCH

Research design decisions depend on the purposes of the study, nature of the problem, and selection of investigative approach. Preference for data collection procedures and data analysis methodology reflect research methodological preferences of MAES staff for social and gender analysis. The staff comprise an expatriate GENESYS team and a national team formed by l'Institut Agronomique et Veterinaire Hassan II (IAV) with technical backup support from GENESYS and DAI/Washington. The GENESYS backup support is a sociologist with extensive experience studying women in agro-industries. The USAID/Washington WID Office also provided backstopping. Both GENESYS and IAV teams closely cooperated to met the demands of the study within the contract period with IAV ensuring proper institutional support. The funding level did not permit the expatriate team to work full time but inter-

[32] DAI, Inc. Morocco Agribusiness Promotion Project Paper. Team Report. January 1991, p.74.

mittently. responding to strategic intervals of the study. This was a management constraint and manageable only because of the excellent survey management by the national team of experts.

GENESYS Study Team

The expatriate team includes a female sociologist who acted as overall team leader and a male social anthropologist. Both had prior work experience in Morocco and specialize in gender analysis. The tasks of this team are management, study design, analysis and report writing. The study design includes preparing draft questionnaire, sampling and research orientation, selection of national team, and securing approval for study from the GOM. Management includes supervision of survey implementation, subcontractor budget, case study methodology, liaison work, and presentation of survey results in interim and final reports. Data analysis includes of firm and employee questionnaires. The sociologist analyzed the firm level questionnaire and prepared the framework, the social anthropologist analyzed the employee questionnaire.

National Study Team (IAV)[33]

The national team includes IAV and ORMVA/DPA personnel with clear knowledge of the sector, good contacts for entry into agro-food enterprises, extensive interview experience in those industries, and women seasonal workers in agribusinesses. That team's tasks include survey organization, survey supervision, data preparation for analysis, periodic progress reports, and the case studies. Their tasks have been intensive and extensive since they prepared the final sampling methodology for employee and firm samples; translated, amplified, and pretested questionnaires; trained interviewers; developed case study methodology; finalized case study questions, analysis, and write up; prepared "cleaned" data diskettes from firm and employee questionnaires and preliminary statistical tables; and provided background for the GENESYS team.

The IAV team is composed more of MARA adjoint personnel than IAV professors and students. The team, managed under the competent leadership of a sociology professor at the Complexe Horticole d'Agadir, includes three assistants for budget, training, and general management; regional coordinators and interviewers; and a statistical data management team of 7 persons under the able leadership of a

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[33] L'Institut Agronomique et Veterinaire Hassan II (IAV) won a subcontract based on competitive bidding. A Request for Proposals was announced in the newspaper on October 22 1992, with date of submission November 3, later extended to November 5, 1993. Out of 25 candidates who collected Requests for Proposals, 14 proposals were submitted. A 5 person committee, selected to evaluate the proposals, included 2 persons from USAID/Morocco — the WID Officer in the Program Office and the MAPP Project Officer in the Agricultural and Natural Resources Office; 1 from the Ministry of Agriculture and Agrarian Reform (MARA), the Chief of the Service Industries Agricoles; an Economics Professor from Hassan II University who has studied this sector and currently engaged in research on urban labor participation of women; and the MAES coordinator. The other MAES expatriate team member and GENESYS backstopper reviewed the top four candidates and concurred with final decision, which was made by DAI, Inc. in Washington, D.C.

The competition indicated there are competent professional teams in Morocco with broad survey experience, good quantitative and computer skills. The deciding factors for selection of subcontractor were: how well proposals indicated that candidates understood the project, how they approached the sampling, how well they understood the agribusiness sector and how quickly they could launch the research. Appendix B includes a copy of the evaluation form. The evaluation scores were standardized, averaged then ranked. The highest average standard score was 2.19, the lowest average standard score was -1.91. The average brut score was 52.7, median 54 and mode 55.

computer specialist. There were 7 regional coordinators and 29 interviewers. All assistants and coordinators were male who secured firm approval and carried out the firm level survey; 55 percent of interviewers were female. All had prior experience in interviewing in agro-food industries, have worked closely with the ORMVAs or DPAs, depending on region, in various interview activities or professionally. Out of the full field staff, 13 were Ingénieur Agricole, Agronome, Agro-Economiste or Horticole and 12 were Adjoint Technique Agricole; the remainder were nearly all extension specialists, professional interviewers in agriculture or science students. One coordinator was a sociologist with considerable experience carrying out surveys in agro-food industries. Hence the field staff were a higher calibre than students, so the costs of each interview was higher than originally budgeted but the results, because of the interviewers understanding of the domain, are of high quality.

The data management team under the IAV subcontract, directed by a computer engineer with assistance from a statistician, includes one female among the five persons engaged in coding and data entry. Data entry was initially slow due to lack of access to computers and to SPSSPC+. Nevertheless, the data management team overcame their initial difficulties to ensure a clean database and statistical tables for analysis by the GENESYS team on time. The methodology used for cleaning data is provided in Annex F.

Because there were numerous professionals involved with the executing this study, important variables, processes and interactions required extensive attention and management as various project activities unfolded. The research design, as a result, pioneers new ground for agro-enterprise human resource studies using social and gender analyses and provides fruitful hypotheses for further study and evaluation measurement from a sociological perspective.

INSTITUTIONAL SUPPORT

The study could not have been accomplished without the support received from other organizations. The most significant support came from the Ministry of Agriculture and Agrarian Reform (MARA), especially the Director, Assistant Director, and technical cadres of the ORMVA of Souss-Massa. The Chef de Service of ORMVA of Souss-Massa, in particular, provided key technical and management assistance and immensely assisted in all aspects of the study both from his key position in ORMVA and as assistant to the project. Likewise, the execution of this study in the field would not have run smoothly if it had not the professional assistance, close association, and able support of the ORMVAs and DPAs overseeing the zones in which the agro-enterprises are located.[34] These include:

- ORMVA of Moulouya (Berkane);
- ORMVA of Loukkos (Larache);
- ORMVA of the Haouz (Marrakech);
- ORMVA of Souss-Massa (Agadir);
- DPA of Fez;
- DPA of Meknes; and
- DPA of Casablanca.

[34] The good relations of ORMVA/DPA cadres with enterprises and the confidence shared between them and enterprise directors resulted in only a few enterprise directors refusing to allow themselves or their employees to be interviewed.

The Service Industries Agricoles, MARA, also facilitated execution. The Service Industries Agricoles provided lists of firms, background data, information for sampling to both national and expatriate teams, and reviewed proposals for the subcontractor. It sent official letters to firms and other government offices indicating the nature of this study. IAV also sent letters that were delivered by ORMVA/DPA staff to enterprise directors. Entry into agro-enterprises would not have taken place without official notification. The Ministry of Commerce and Industry helped secure employment and firm data and prior studies of employment in agro-food industries for study design preparation. In addition, the Aridoculture Centre in Settat (INRA) provided training in statistical package programming. The tremendous input of the public sector toward interviewing private sector firms on employment issues demonstrates GOM concern for the effects of the development of this sector and its potential economic and social impact on workers.

The response from the private sector was favorable on several counts. First, most enterprises allowed interviews on employment and labor issues, which are considered sensitive issues around the world. Lagers and null cases were not significant to affect sampling. In a few regions, however, some firms did have to be repeatedly visited to secure permission. Reticence was due less to the topic — except in a few cases — than the frequency firms are asked to provide statistical information — although they admitted seldom on employment conditions. Second, directors generally do not like interruptions unless they can see a direct immediate economic benefit and became interested in the study results. One firm director asked if he could have copies of his workers' responses without identification of employees so he could program employment needs and understand his workers better. Third, some firms used the interview to learn about the MAPP because interviewers carried a project brief with them. Subsequently some firms contacted the MAPP office in Casablanca.

SUMMARY

The GENESYS Moroccan Agribusiness Employment Study is a free-standing study. Its information, reliably obtained, can serve MAPP by providing baseline indicators on employment in post-horticultural firms as well as indicators for monitoring and evaluation of employment conditions and factors affecting worker performance in transformation enterprises of the post-horticultural sector. It is a sociological study. As such, it emphasizes social rather than technical measurement of productivity and gender-specific indicators. As a national representative sample of major commodity transformation firms, it provides a current assessment of workers, particularly unskilled workers and female employees. It describes existing conditions in the agribusiness sector and their affects on employment generation and worker performance, particularly of females.

CHAPTER THREE

RESEARCH METHODOLOGY

INTRODUCTION

The section is divided into three parts. The first covers the research hypotheses and subsequent modifications. The second includes the sampling methodology for enterprises, employees and case study selection. The third reviews the original project schedule and revisions required. The fourth provides an update on firm and employee surveys.

GUIDING HYPOTHESES FOR STUDY

The study is formulated on the basis of the five working hypotheses:

- Hypothesis 1: The more secure the firm's raw product source and export market contracts, the higher the wages, the more worker services, the greater the productivity of employees.
- Hypothesis 2: Employment level, worker physical conditions, worker access to health or social services differently affect productivity or work performance of male and female employees.
- Hypothesis 3: Impact on person and household livelihood, welfare and life chances varies by gender employment pattern and gender differences in income generation.
- Hypothesis 4: Diversification of activities and products processed by the firm determines its work calendar, and by consequence working conditions and worker performance.
- Hypothesis 5: The level of technical skills and training of cadres and their permanent skills upgrading influence worker performance.

These hypotheses were used to organize the structure of the descriptive analysis. They were not formally tested.

SURVEY METHODOLOGY

A multi-stage, cluster sampling methodology was applied to select representative firms of post-harvest export industrial units. Three selection criteria were used: region, post-harvest activity (storage, packaging, processing), and products handled. Size was a fourth criteria for sampling within firms for employee data collection. The subcontractor specified the methodology based on propositions set forth in the request for subcontractor proposals. Steps for selection include:

- **Step 1.** Regional selection. Selection was based on the diversity of post-harvest activities existing within a region and high concentration of post-harvest enterprises within the region. Regions selected were Berkane (Moulouya), Meknes-Fez, Larache (Loukkos), Casablanca, Marrakech (Haouz), and Agadir (Souss-Massa).[35]

- **Step 2.** The sampling n enabled representativeness. The number of firms represented at least 12 percent of firms engaged in processing, packing and cold storage. By 1992, 481 industrial units were engaged in processing, packing and cold storage of agro-food specific activities, 397 units located in above regions.[36] Sixty firms represent 12 percent of all such industrial units, 15 percent of all such firms in the above regions, a sufficient number given survey budget limitations.[37]

- **Step 3.** The sampling p was determined for type of major activity of each industrial unit. The proportion of units engaged in each of the three above activities by subcommodity by the total number of units engaged in these specific activities within selected regions engaged in activities (base 60). The proportion within sector was distributed according to the proportional distribution of units by region. Activities included: processing of fruits and vegetables; spices and condiments; olives and olive oil, wine; fruit and vegetable cold storage; packing units for citrus, *primeurs*, and flowers.[38]

- **Step 4.** Size of firms is determined by number of employees and divided into small, medium and large so that the employee sample would be representative of employees by size of firm. Large was defined as 200 or more employees, medium 50-199 employees, and small less than 50 employees.[39]This does not represent the size of firms in the various sectors. Without prior information on number of employees, size could not be used as a sampling criterion.

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[35] Loukkus region does not demonstrate diversity of post-harvest activities; however, 17.44% of all vegetable processing industrial capacity in Morocco is found in Larache (MARA, 1988); Larache agro-food units also have a significant role in tomato processing exports and affect strongly the commercial production of tomatoes in the north. Regions not selected include: Kenitra which contains 11% of citrus packing units but due to a de-focus on citrus and few other firms (3 other processing agro-food units and one winery); El Jadida, which contains 35% of early vegetable packing was excluded only to minimize spatial dispersion of industries and reduce survey costs. El Jadida contains 3 processing agro-food units, 2 flower cold storage units besides vegetable processing units. Beni Mellal was excluded because it contains only 1 citrus and 1 flower packing unit, 1 oil refinery and 1 cold storage unit for fruits and vegetables (MARA 1992).

[36] Agro-food specific activities were in fruit and vegetable exportable items. The total was reduced to 472 after a first pass of industrial units to assess placement in the selected categories.

[37] That only 59 instead of 60 firms were selected therefore does not affect the representativeness of the sample.

[38] The sampling proportions are somewhat forced since many firms engage in diversified products to extend their work calendars and minimize risks (for example, *primeurs* and citrus; olives, olive oil, condiments or spices are often engaged in by the same processing unit); moreover, most packing units also have cold storage units; few cold storage units only serve the fresh fruit and vegetable sector, unless for tree crops outside the regions of study, such as in Midelt. Citrus was considered a separate category because of its major importance to Morocco export trade; moreover, many packing units do not exclusively engage in packing citrus, though are primarily known for citrus.

[39] Originally we proposed large to be 100 or more employees, but because there were more societies with 200 or more, to enable a better distribution by size, we enlarged the parameters. Moreover, there were no small wineries, no small citrus packers, no small cold storage. Many small olive oil units were closed this year due to low olive production.

- **Step 5.** Size of employee sample by size of firm. The number of employees interviewed in large firms was 25, medium, 26 and small, 8.[40] Number of employees to interview within firm was calculated during director's interview. Number represents 5-10 percent of firm employees.

- **Step 6.** Number of employees to be interviewed by category and gender. Interviews were to be weighted toward unskilled workers (3:1); among workers, females were to be weighted twice male workers. The high portion of unskilled workers and high proportion of females among workers meant weighting was unnecessary. Selection of interviewees was naturally biassed toward women and persons of lower socio-economic status due to their large number.

Annex C includes the table of sampling proportions. The number of firms sampled by activity and region is described in Table 2 below.

TABLE 2

POST-HARVEST HORTICULTURAL FIRMS INTERVIEWED
BY REGION AND PRINCIPAL ACTIVITY, 1993[1]

REGION	PROCESSING UNITS				COLD STORAGE	PACKING UNITS			N
Principal Activity	Fruit & Veg.	Spices Colorings Condiment	Olives Olive Oil	Wine		Citrus	Primeur	Flowers	
Berkane	0	1	0	0	0	3	0	0	4
Meknes/Fez	1	0	7	2	1	0	0	0	11
Larache	1	0	0	0	0	0	0	0	1
Casablanca	1	1	2	1	2	2	3	1	13
Marrakech	3	0	7	0	0	1	0	2	13
Agadir	0	0	0	0	0	4	11	2	17
TOTAL	6	2	16	3	3	10	14	5	59

Activities are classified by highest tonnage of primary product with the following exceptions. Pack Souss is classified as *primeur*, even though citrus tonnage is higher because it has high *primeur* tonnage and almost even split between both. MACROCAPRES is classified under olives and olive oil units even though primary product tonnage of capers is higher than of olives but final production of olives is higher than of capers; Huillerie Talbi primary and final production of carob is higher than that of olives but it engages in olive processing and was established for olive processing.

[40] During training the number of interviews per firm was decided to be 20, 10, and 5, respectively by size of firm but later these numbers were increased.

CASE STUDY OF EMPLOYMENT AND PRODUCTIVITY ISSUES

The case study objectives are to elaborate on aspects of employment and productivity of workers and to provide greater detail on the impact on employment in this sector on workers within the lower socio-economic categories. The case study also serves to amplify our understanding of perceptions of productivity by both workers and enterprise decision-makers. Specifically, this section details:

- Worker perception of their constraints and motivations of productivity in the personal and familial situation;
- Impact of employment on the lives of workers and their families; and
- Perception of enterprise decision-makers on the employment situation and productivity.

The methodology for modal worker selection was modified from that proposed in the Request for Proposals due to delay in employee data analysis, closure of certain firms for Muslim holidays or for the season, and contract deadlines. The change enhances data quality on impact of gender employment since modal is defined by characteristics both of firms and of employees. The methodology is detailed in the case study presentation. Worker selection is based on six criteria:

- Dominance of activities within post-harvest handling sector (packing and processing);
- Regional dominance of each type of activity (Marrakech, processing; Agadir, packing);
- Amount of products transformed and exported. Includes firms above and below the average for each transformation type. Processing products include olives, apricots, capers, and cornichons (the largest number of processing firms sampled); packing products include *primeurs* (the largest number of packing units sampled); amount of tonnage exported >50 percent;
- Size of work force (two firms above average, 2 below; 1 processing below average);
- Selection of worker based on permanency of position, qualification, and sex; and
- Selection of working class categories by length of time worked in firm, age, marital status, migration status, and receptivity and openness to interview.

Thirty-six interviews were completed using two open-ended questionnaires. One questionnaire, directed toward supervisors and directors, concentrated on obtaining greater detailed information on productivity and measurement of worker performance. Another was directed toward unskilled seasonal female workers and focused on motivational factors and employment impact.

DATA COLLECTION

This section describes the project schedule and its revisions, survey activities and scheduling, the training and pretest of questionnaire procedures, survey implementation, number of interviews completed, and survey data preparation.

Study Schedule

The study officially began in June 1992 with the collection of relevant information for preparation of study design and contact with MARA to initiate official study approval and awareness of the study. MARA in July requested the study be initiated from September 1992, which is the official beginning of the Moroccan Agricultural Calendar and when the MAP project was to be officially setup by the subcontractor. Concerted efforts were therefore postponed accordingly.

From September to October 1992, expatriate team members prepared research design and draft questionnaires and selection of subcontractor methodology. Preliminary selection of the national team took place in Morocco in mid-November and final selection in Washington in December. The subcontract with IAV was signed in January 1993. The survey was carried out from mid-January to end-March 1993, data entry carried out in April and May. In May, interim report writing and preliminary analysis and data checks on firm data, preparation of the case study methodology and questionnaire for qualitative study, case interviews, and data entry of employee questionnaire was carried out. Data analysis and final draft report writing were carried out from June through July. See schedule revisions in Table 3.

Survey Activities and Scheduling

Between December 1992 and January 1993, preliminary work on questionnaire preparation and firm selection was carried out. A pretest of the questionnaire was made between mid-December 1992 and mid-January 1993 in Agadir. A sample of firms to be interviewed, initially prepared in November 1992, was sent to regional coordinators in January for coordinators to confirm when the enterprises were open, their general and this year's work calendars, address and telephone number, and number of permanent and seasonal workers; to identify whether the enterprises are engaged in any export activities; and to assess the enterprise responsiveness to survey participation.

The sampling list was revised in January and February according to sampling criteria and responsiveness. An alternative sampling list of firms composed of enterprises of similar size, commodity, and posthandling process was also drawn up. To ensure the sampling methodology remained in effect, the number of firms specified in the RFP was respected. Drawing up the sampling list was not an easy task despite the lists of enterprises available from MARA and the Ministry of Commerce and Industry. Many firms engage in several activities so that its placement had to be judged on additional information. Employment data, for example, are not as relevant as tonnage for packing and cold storage unit selection. Not available usually on government lists by industry is gender employment distribution by type of firm. Only employment data are globally reported by sector. Moreover, many small firms — particularly olive and olive oil processing units — were closed or operating at reduced capacity this year due to drought.

From January 1993 to end of March 1993 interviewers and coordinators were trained, and firm and employee surveys were carried out. Official letters were prepared by IAV, USAID, and MARA. Regional coordinators personally took letters from IAV with a summary of the MAPP activities to each enterprise to secure full knowledge and cooperation. No firm would allow interview without official receipt of notification.

In April and May, both surveys were coded, entered on the computer, checked by both the Agadir/IAV team and GENESYS team, and corrected. If errors could not be resolved through statistical or questionnaire review, then regional coordinators were contacted to obtain missing information.

Preliminary tables on the firm level data were finalized on June 8; preliminary tables on employee level data were ready by June 15. Case studies were completed by June 10.

TABLE 3

PROPOSED AND REVISED STUDY AND TASK SCHEDULE

Proposed Date	Revised Date	Tasks Involved
November 3	November 5	Contractor proposals due
November 9	1) November 12 -selected; 2) December 24- approved by GENESYS, DAI, fax to IAV; 3) January 4 — officially signed.	Contractor selected.
November 15	1) November — preliminary list; 2) December — revised list; 3) February-provisional list; 4) May-final list	Contractor: Final list of sample firms submitted.
November 22	January 25- training and questionnaires finalized and sent to all regions.	1) MARA: Notifies firms; 2) Contractor: Questionnaires printed; trains interviewers.
November 23-December 6	1) Mid-January — pretest 2) Feb. 15-interview schedule tentatively confirmed	1) Pre-test of firm level questionnaires. 2) Schedule set for interviews.
November 28-December 7	1) March 31-surveys completed 2) April 30 — provisional firm data 3) March 15-dummy tables identified	1) Conduct quantitative survey 2) Data entry to SPSSPC+ or Lotus 3) Prepare descriptive data tables
Not previewed	1) May 30 (est.) firm data ready 2) May 30 expected employee data for GENESYS cross check	Insufficient time allocated to preparation: cross-checking, revisions, coding open-ended questions & data entry
March 1-31	1) May 31-Interim Report 2) May 11-Revised methodology for case study submitted 3) May 19- Draft questionnaire for case study submitted 4) May 18-decision to stop firm interviews finalized with USAID	1) GENESYS -interim report; 2) Contractor develops interview list drawn from employee survey; finalizes interviewer questions and schedule; completes any outstanding firm interviews.
April 1-30	1) June 15-in-depth interviews completed 2) May 30-tables for firm prepared 3) June 15-employee data crosschecked 4) June 25-employee tables prepared	1) Contractor does in-depth interviews 2) Contractor does summary reports; 3) Contractor prepares 2 sets of diskettes with raw data (Lotus format), codebooks and instruction.
May 1-31	1)July 20-draft survey report 2) July 20-draft case study report	1) GENESYS team does final report of surveys; 2) Contractor completes case studies.
June 1-15	September 30	Final report edited and published.

Training Programs

Training various teams has been an important part of this project to ensure reliable data sets. Two types of training have taken place even though only one was budgeted. The first training was of regional coordinators and interviewers regarding the survey methodology and survey instruments. The second type was data management and statistical package training. Annex C provides the Training Program Outline and Schedule used for the survey training session held in Agadir.

Survey Training

Five training sessions were carried out for interviewers and regional coordinators. The change resulted from the distance and costs of sending all personnel from all regions to Agadir and the inability to secure dates on which all Regional Coordinators and interviewers could be present. The first training session was held from January 9-11, 1993, in Agadir for Agadir, Marrakech, and Casablanca interviewers and coordinators. Another was held from January 12-13, 1993, for Meknes coordinators and interviewers and January 14-17, 1993, for interviewers and coordinators in Fez. Both were conducted by the able co-trainer of the Agadir training seminar and Regional Coordinator for Agadir. A fourth was held in Berkane on January 19, 1993, by a professor whose specialty is floriculture at IAV in Agadir, one of the survey collaborators also cooperating in the Agadir training, and a native of Berkane; and a fifth was held at Ksar El Kébir on January 28-29, 1993, for the interview team and coordinators for Larache. The last training was conducted by a professor of crop science at IAV in Rabat, an assistant project director and participant at the main training held at Agadir. Because trainers for the outlying seminars were also participants at the main training seminar at Agadir, consistency in training occurred and minimal errors are expected to be due to translation and variability in questionnaire interpretation.

Language and question interpretation were major issues during the training sessions. Each question was thoroughly explained not only for its meaning in French and in English but also for its translation into Arabic, and occasionally into Berber. Agreement on translation is very important in this type of survey because many questionnaires were drafted in English then translated to French whereas others were prepared only in French. The questionnaire was in French but most worker interviews were in Arabic. All the coordinators and interviewers were fluent in French and Arabic, had much experience in making simultaneous translations, and understood agro-industrial technical terms needing translation.

Data Management Training

Data management training in explaining the coding process and data entry was held March 15-16, 1993, in Agadir under the direction of the assistant project director, computer engineer managing the data management program, and a statistician. A two-day seminar was also held at the Aridoculture Centre in Settat on use of SPSSPC+ in April 1993.

Survey Implementation and Issues

The interview schedule was set according to recommended calendars of Regional Coordinators. The final questionnaires were distributed to Regional Coordinators on the following dates:

- January 8,1993: Agadir
- January 10,1993: Marrakech and Casablanca
- January 12,1993: Meknes

- January 14,1993: Fez
- January 19,1993: Berkane
- January 25,1993: Larache

Dates were fixed by Regional Coordinators in agreement with firms. The Regional Coordinator personally delivered the official letters to Directors along with a brief about the MAPP. In some cases interview at the firm level and of employees occurred on same day; in most cases the firm level questionnaire wa administered prior to the employee questionnaire. Directors or managers usually wanted to review the employe questionnaire before deciding on whether to allow the interview with employees to take place and th methodology of employee selection and number to be explained. The employee questionnaire implementatio date was not fixed until the director approved the questionnaire and date of interview.

Interview execution was not easy but did go relatively smoothly. Factors such as temporary stoppage o work activities and absence of directors on scheduled dates due to work or other activities meant that coordinator and interviewers frequently had to return to firms to secure fixed dates and carry out interviews. Some region and types of firm interviews had problems because the interview was latter than the season that had bee previously scheduled.[41] In Berkane, interviews started later than the season for *niora* processing; the date th firm was contacted for interview, for example, was the last day of work of the season. For another firm i Berkane, the firm was closed for the season at the time of interviewer training. The selection of employees fo the latter firm hence depended on who was still around or whom the administration knew could be contacte easily (from address or familiarity).

In Fez, there was difficulty finding appropriate olive oil and olive processing firms open — particularl smaller firms — due to the short season and low production. Meknes incurred many problems securing approva for interviews and the team had to repeatedly return to firms (one firm 26 times, another 8 times) to secur permission. Another firm in Marrakech had to be canceled after the firm interview because the Director woul not allow female employees to be interviewed. In this case, however, another fruit and vegetable processin industry was easily substituted from the alternative list due to the number of similar type firms within the region In Agadir, two firms were not interviewed and two would not permit their employees to be interviewed unles in the director's presence, even though the director did allow the employees to be selected at random. Th manager of one firm, a cold storage unit, refused after persistent requests. He recommended that approval b obtained from the firms's head office, located in Casablanca; yet when the head office was contacted it never sen the firm an official letter so the refusal stood. The other, a tomato-processing plant, normally opens after th *primeur* export season of tomatoes is over, but had not opened by May 1. The manager said the price of primar products was too high this season. The closure of the Agadir processing plant was not a problem due to th sufficient number of such firms sampled in other regions. In Casablanca, considerable persuasion had to b exerted to carry out interviews, particularly in the larger firms with "big bosses." In part it was also a consequence of the frequency which these firms are requested to permit interviews from government and university researchers. Without help from the DPA and one of the assistant directors, interviews in these firm absolutely would not have been obtained.

Number of Survey Interviews Completed

Most interviews were completed by the end of February. Only a few were scheduled for March because of their processing activities' schedule (see Annex E). The 59 firms were interviewed and employee surveys

[41] The original time schedule was that interviews would begin in December but due to contract formalities and December holidays was delayed from early December to January, thereby delaying all subsequent events.

completed in 58. The number of employee interviews is 847. Thirty-six persons were interviewed for the case studies.

On average, each employee interview took 1.25 hours. Due to length of questionnaire and periodic interruptions, no more than 2 interviews usually were completed at one time. Not all questions were probed sufficiently, but, in general, the interviewing went smoothly. Information is considered sufficient and reliable to develop sound indicators which MAPP and others can use for monitoring and evaluating the impact of development assistance in this sector on gender of workers, and in particular on workers in lower employment positions.

The execution of the enterprise questionnaire required great interviewer patience. Usually the director or manager was continually interrupted by work demands; interviews frequently had to be completed in several callbacks. Administrators/directors were also found to be receptive to questions, except for those which asked them to detail information on sales, production levels, and losses. As a result, on average the firm interview took 3 hours. Many interviewers remarked that they found the work/stress demands placed on directors and managers astounding.

TABLE 4

SUMMARY OF FIRM AND EMPLOYEE INTERVIEWS IN MOROCCO AGRIBUSINESS EMPLOYMENT SURVEY, 1992-1993

Region	Firm Survey		Employee Survey	
	Planned	Completed	Firms	Employee
Berkane	4	4	4	78
Meknes/Fez	11	11	10	121
Larache	1	1	1	38
Casablanca	13	13	13	180
Marrakech	13	13	13	230
Agadir	18	17	17	200
Total	60	59	58	847

Survey Data Preparation and Analysis

Recognized early was that data entry would be slow and analysis selective due to the large number of variables, inclusion of many open ended questions in both questionnaires, and use of nonprecoded questionnaires. The original survey budget was insufficient to cover data preparation and analysis stages. In November an extension was requested to cover additional costs. Moreover, the size of database made LOTUS an inappropriate program to use for analyzing the employee questionnaire.[42] Data were prepared in Lotus 123 files (4 for employees, 2 for firms), and analyses carried out using Lotus 123, QPRO or SPSSPC+.

SUMMARY

The survey increased in scope and depth from the request for proposals. Even during the study its complexity, the thoroughness of the subcontractor to ensure a well-executed survey, increased the number of persons involved in the research and time to fully exploit the data. The result is that time for execution, supervision, data entry, management, and analysis was too limited for a survey covering one agricultural season such as this one; the data, however, are of high quality and are suitable for a variety of subsequent analyses as well as for meeting the original purpose for which the research was designed.

[42] There are 262 variables,about 222,700 bits of data for the employee survey only.

CHAPTER FOUR

SUMMARY AND CONCLUSIONS

The Moroccan economy is growing but it must grow more to keep up with population growth. Important to the economy is that 40 percent of its labor force is in the agricultural sector and its industries. Due to high population growth rates, approximately 250,000 workers per year, many poor and with minimal education, will need to be absorbed into the labor force due to Morocco's growth rate — a factor that suggests a strong push toward further industrialization, agribusiness promotion, and a need to redress insufficient nonfarm employment opportunities in rural areas for young men and women.

Economic policy changes have stimulated private sector growth, directly favor agricultural development, and encourage export promotion of horticultural packaged and processed products. Employees in the post harvest agro-enterprises rather than those employed in ancillary agricultural activities are likely to be the most significantly affected by Moroccan export-oriented industrialization models based on trade liberalization, stimulation of foreign investment and trade, private sector promotion, and promotion of new technologies. Although this should have positive affects on employment opportunities for men and women in both rural as well as urban areas and on reducing urban employment, low cost labor is a major determinant of Moroccan companies' competitive advantage in the global market place of fresh agricultural produce and preserved fruits and vegetables (Sullivan, 1991).

The Moroccan Agricultural Employment Survey (MAES) carried out agribusiness surveys at the firm and employee levels to look at factors affecting employment generation and productivity and described the characteristics of employees in post-horticultural processing firms. In-depth case studies of employees supplemented survey data to capture the impact of employment in this sector on lives of workers, particularly female workers, and to improve understanding of "productivity" as perceived by workers and company directors.

The study's primary objective is to prepare a set of baseline data on employment and employment-related factors to enable the Moroccan government and USAID to assess in its promotion of agribusiness, the significant contribution of its supported developmental efforts on employment generation and work performance of both men and women of lower socio-economic groups, concentrating on women employees in worker rather than technical or administrative positions.

Its secondary objectives, for which separate study volumes are prepared, are to:

- Describe organizational issues pivotal to the this subsector's post-harvest labor force and to the employment of women;
- Describe factors affecting worker productivity and employment that require attention or remedy in the post-handling phase of horticultural export promotion; and
- Discern impact of employment on person and household livelihood.

The major post-harvest handling units include processing, packing, and fruit and vegetable cold storage, because these are activities in which large numbers of persons are employed. Less emphasis is placed on cold storage because MARA was engaged in a national study of cold storage at the time of this study. Firms surveyed include fresh early season and seasonal vegetables (*primeurs*), fresh and frozen fruit, canned and processed fruits

and vegetables, spices and condiments, olives and olive oil, and flowers. Firms include therefore the post-harves handling processes of transforming, packaging, and cold storage.

Data draw profiles of employees in all positions and work statuses. Data examine firm industria organization characteristics, productivity constraints, job and workplace conditions, access to health and socia services, and indicators of worker productivity, worker performance, employment regularity, and labo recruitment methods. Employment data provide indicators of: employment conditions, productivity anc performance indicators, training and skills needs, worker benefits and incentives, job security and advancement, access to health and other services, work performance, and impact of work on person.

Employment profiles are constructed at three levels:

- Firm survey
- Employee survey
- Employee case study

Particular attention is paid to discerning gender-based constraints to employee motivation and socio-economic factors and perceptions of factors affecting productivity or worker performance by gender of employee at the firm and employee levels. Case studies provide qualitative information and depict impact of employment on person and household livelihood, security, and opportunities. The situation of workers, particularly unskilled female workers, is featured and detailed. Employment issues pivotal to men and women working in permanent and seasonal working categories and to the unskilled labor force are emphasized at all levels. Because the majority of workers are women, factors affecting women's employment and productivity are highlighted and underscored in all project activities.

A multi-stage, cluster sampling methodology was applied to select representative firms of postharvest export industrial units. Three selection criteria were used: region, post-harvest activity (storage, packaging, processing), and products handled. Size was a fourth criteria for sampling within firms for employee data collection. Regions selected were Berkane (Moulouya), Meknes-Fez, Larache (Loukkos), Casablanca, Marrakech (Haouz), and Agadir (Souss-Massa). The number of firms represent at least 12 percent of firms engaged in processing, packing, and cold storage and 15 percent of all such firms in the selected regions.

The number of firms interviewed was 59 and employee surveys were completed in 58. The number of employee interviews is 847. Thirty-six persons were interviewed for the case studies.

The study is divided into five volumes. Volume I is the Executive Summary; Volume II, Research Design and Methodology; Volume III, Enterprise Analysis; Volume IV, Employee Analysis; and Volume V, Case Study Analysis. Copies of the questionnaires, sample information, labor legislation, and survey implementation activities are included in Volume II.

ANNEX A

A GUIDE FOR INVESTORS:
OFFICE FOR INDUSTRIAL DEVELOPMENT
MOROCCO'S LABOR LAWS

MOROCCO'S LABOR LAWS

Morocco has modern labor laws based on the agreements and recommendations of the International Labor Office.

.1. Employment Contract

The contract of employment is signed between the employer nd the employee.

There are both the specified term contract and the open term ontract which may be terminated of either party's own free will.

In the event of discharge, permanent staff, shall be ntitled to a redundancy payment amounting to :

48-hour salaries/wages within the first 5 years ;
72-hour salaries/wages from the 5th trough the 10th year ;
96-hour salaries/wages from the 11th through the 15th year ;
120-hour salaries/wages beyond 15 years.

2 Statutory Working Conditions

The statutory working conditions cover the following adings :

Classification of Personnel
Conditional Employment Period
Hiring
Laying Off
Breach of Contract by Discharge or Resignation
Paid Leave, Discipline, Sick Leave and Absence.

Wages

Pay rates are freely agreed upon by employer and employee, , they shall not be lower than the minimum wage for industry commerce (SMIG)* or the minimum wage for agriculture. AG)** depending on the sector concerned.

All workers shall, in addition to their wages, get a iority bonus amounting to :

percent of the salary after 2 years' continuous/non continuous service in the same establishment or with the same employer ;
0 percent after 5-year service ;
5 percent after 12-year service ;
0 percent after 20-year service.

MIG = DH 6/Hr - **SMAG = DH 31.08/Day

6.4 Working Hours and Paid Leave

a. Working Hours

In industrial and commercial businesses, the effective working time of employees of any age and either sex shall not exceed 8 hours a day or 48 hours a week.

Salaries shall be increased by 25 percent for overtime worked between 5 a.m. and 10 p.m. on workdays and 50 percent between 10 p.m and 5 a.m. ; on the week's day-off or public holidays the same overtime is rated 50 percent and 100 percent.

b. Leave

Annual Paid Leave

Employees with over six months continuous and effective service are entitled to paid leave.

The right to benefit from paid leave is calculated at the rate of 1 1/2 workday per month of service (two workdays per month of effective service for juveniles under 18 years of age).

Seniority in a place of business or with the same employer entitles employees to a further 1 1/2 or 2 days of paid leave per 5 years of service.

Weekly Rest

Weekly rest shall last at least 24 straight hours for the whole staff of a same firm.

Statutory Holidays

* January 1 (New Year)
* January 11 (Manifest of Independence Day)
* March 3 (King's Accession Day)
* May 1 (Local Labor Day)
* May 23 (National Holiday)
* July 9 (Youth Festival)
* August 14 (Celebration of Oued Edahab's Allegiance)
* August 20 (Révolution du Roi et du peuple)
* November 6 (Commemoration of the "Green March")
* November 18 (Independence Day)

Religious Feasts <
- 1st Day of Moharrem (Hegira Feast)
- Idul Fitr
- Idul Adha
- Idul Mawlid Annabaoui (Prophet's Feast)

6.5 Social Security

Employers are required to register with the Caisse Nationale de Securité Sociale (CNSS), as well as to register their salaried workers and apprentices with the same CNSS.

Employer's and Employee's Participation to CNSS

The participation payable to CNSS to cover family pay related expenses is rated at 10 percent of the total gross monthly wages earned by each wage worker.

The participation payable to CNSS to cover social security expenses regarding the payment of benefits breakdowns as follows

- Employer's participation : 3.8 % of the total gross monthly wages ;
- Employee's participation : 1.9 % of same.

The employee's total gross monthly wages used as a base to determine the provided for contributions, shall be taken into account only up to a DH 3000 ceiling.

.6 Labor Relations

Moroccan law recognizes the worker's right to form unions o defend their occupational interests.

Individual cases of litigation concerning the enforcem... f work contracts are settled through social courts.

.7 Industrial Injuries and Occupational Diseases

Are considered to be industrial injuries those occuring ring work, on the way to and from the place of work. e employer is required to :

rep rt an industrial injury within 48 hours,
pay the disabled employee a daily benefit equivalent to half his/her salary/wage for the first 28 days after the accident and two thirds (2/3) from the 29th day on, for his/her temporary disability.

As regards occupational diseases :

Workers having an occupational disease shall be entiled to e same benefits as provided by the laws on industrial injuries.

6.8 Medicare

Industrial and commercial businesses employing more than 50 paid staffers are required to make suitable arrangements to provide medicare services. Such medicare services are also required from business units with less than 50 employees insofar as their activities may cause occupational diseases.

Employers shall cover the cost of such medicare program.

6.9 Labor Inspection

The enforcement of Morocco's labor laws is monitored by labor inspectors who will visit places of work to check whether social laws and working conditions are correctly enforced. In addition they inform employees of the statutory provisions concerning them.

Should a dispute arise, labor inspectors shall attempt to settle differences which may oppose to one another employer and employees.

ANNEX B

MAES PROJECT RATING FORM FOR SUB-CONTRACT COMPETITION

DAI/AES Project Rating Form

Signature of DAI/AES Rating Team:	DAI Representative's Name:		
Date of Rating: .	Overall Rating out of 100 pts:		
Criteria	**Maximum Rating**	**DAI/AES Rating**	**Special Conditions**
1. Methodology/plan of action: Organizational strategy for implementing project is clear and realistic; technical details given; methodology is sufficiently detailed, phased, responds to levels of the project. Demonstrates stratified sampling/sampling unit methods.	25 pts.		
2. Questionnaires: Demonstrates understanding of research problem and data set important to it (not data set and look for problem); scales down questions to workable lot; appropriate language depending on class of workers; functional questionnaire setup well.	25 pts.		
3. Reporting/statistical analysis capacity: Demonstrates specific products/ end-points included in the research goals; coherent direction (not parts thrown together), gives clear central focus; suggests balanced presentation; demonstrate access to computers, programs (SPSS/Lotus/WP) and computer staff; demonstrates will be able to meet reporting requirements; can monitor firm's project performance by identified performance indicators.	20 pts.		
4. Team/firm reference/ administration: Disciplines/ training of research team appropriate for topics to be investigated; principal investigator has demonstrated sufficient time commitment/ competency; firm has mobility capacity or access to vehicles; has certifiable management system to be accountable for use of project funds to achieve planned goals.	10 pts.		
5. Budget: Budget justification sufficiently detailed to relate to various phases/levels of project; specific tasks are clearly related to personnel, time, budget; not small allocations of time among large number of investigators/ personnel; disciplines/ training of interview team budgeted appropriately; budget comprehensive/ realistic.	20 pts.		
TOTAL:	100 pts		

ANNEX C

SAMPLING METHODOLOGY FOR FIRM NUMBER, TYPE, AND REGIONAL CLASSIFICATION

Industries de Post-récolte horticole d'exportation: distribution régionale des sociétés par activité (effectifs) (1992)

Régions	Conserves Fruits et Légumes	Epices, Colorants, Condiments	Olive, Huile d'olive	Raisins, Vins	Entrepots Frigo		Stations de Conditionnement			Total	
					Fruits, Légumes	Fleurs[1]	Agrumes	Primeurs	Fleurs	Nombre	%
Berkhane	2	3	-	1	2	-	17	-	-	25	5,2
Meknes-Fes	10	-	42[2]	4	5	-	2	-	-	63	15,9
Larache	4[3]	-	-	-	1	-	3	-	-	8	2,0
Casablanca	13	5	5	5	16	-	17	25	6	92	23,2
Marrakech	3	-	64[2]	-	1	-	3	-	15	86	21,6
Agadir	8[2]	-	2	-	10	-	26	62	15	123	31,0
TOTAL	40	8	113	10	35[4]	-	68[5]	87	36	397	100 %
Autres régions	7	-	-	3	9	4	10	49	2	84	-
TOTAL GENERAL	47	8	113	13	44	4	78	136	38	481	-

Légende :

[1] La plupart des stations de conditionnement des fleurs disposent de leur chambres froides.
[2] Certaines de ces unités produisent de la conserve des fruits et légumes et/ou des condiments (câpres, cornichons).
[3] Deux unités parmi les 4 transforment aussi le NIORA (épices).
[4] Nous avons exclu les entrepôts des pommes, poires, bananes (marché intérieur).
[5] 9 stations d'agrumes - primeurs.

Sources :

Ce tableau a été élaboré à partir des sources suivantes :
. Ministère du Commerce et de l'Industrie (1992) ; Maroc Industries 1991-92 ; Les O.R.M.V.A. de Moulouya, de Haouz et du Souss-Massa ; KOMPASS 1989-90 ; M.A.R.A. 1992 ; AMPEX Fleurs ; ASPEM, Station de Conditionnement 1991-92 ; E.A.C.C.E. listing des stations de conditionnement 1992 ; Agenda de l'Agriculture Marocaine 1992.

ANNEX D

TRAINING PROGRAM BRIEF FOR FIELD PERSONNEL FOR FIRM AND EMPLOYEE SURVEYS

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE DE L'EXPORTATION.

PROJET I.A.V. HASSAN II/U.S.A.I.D.

PROGRAMME DE STAGE DE FORMATION DES COORDINATEURS ET DES ENQUETEURS

A AGADIR DU 9 AU 11 JANVIER 1993.

LE 09/01/1993 :

- Arrivée des stagiaires.
- Inscription et distribution des dossiers du stage.
- Etude personnelle des dossiers.

LE 10/01/1993 :

- 9H00 à 10H00: Présentation des participants et présentation du projet.
- 10H à 11H00 : Présentation de la fiche de "Enquête Employés".
- 11H à 11H15 : Pause Café.
- 11H15 à 13H : Discussion générale sur la fiche et la la méthodologie de l'enquête.
- 13H00 : Déjeuner.
- 15H à 17H00 : Présentation étude et discussion des fiches de "Enquête Sociétés.
- 17H à 17H15 : Pause Café.
- 17H15 à 19H : Exposé sur les chaines de conditionnement.
- 20H30 : Dîner libre.

LE 11/01/1993 :

- 8H00 : Petit déjeuner.
- 9H00 : Remise des dossiers des enquêtes. : Questionnaire, lettres destinées aux Sociétés.
- Départ des participants.-

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE ORIENTEE VERS L'EXPORTATION

NOTE EXPLICATIVE

OBJECTIFS.-

Cette étude porte sur le secteur des industries horticoles à vocation exportatrice notamment les conserveries végétales, les stations de conditionnement et les entrepôts frigorifiques.

L'objectif principal de l'étude est d'examiner l'impact des aspects institutionnels et des caractéristiques socio-économiques des employés sur l'emploi et la productivité des travailleurs de ce secteur.

L'étude permettra de dresser le profil des différentes entreprises consacrées à l'industrie horticole et de toutes les catégories d'employés de cette industrie. Sur cette base, l'enquête doit répondre aux questions suivantes:

1.- Quels sont les effets des contraintes au niveau de l'entreprise (approvisionnements en matière première, commercialisation et gamme de produits traités et finis) sur l'emploi et la performance des travailleurs.

2.- Comment le niveau de qualification, les conditions physiques et l'accès aux services sociaux et médicaux affectent la productivité des travailleurs, masculins et féminins.

3.- Comment l'accès différentiel à l'emploi et aux revenus selon le sexe des travailleurs affecte le niveau de vie des employés et de leur famille .

L'enquête concerne les travailleurs permanents et saisonniers. Du fait que la majorité des employés du secteur est constituée d'une main d'oeuvre féminine et peu qualifiée, une attention particulière sera accordée à cette catégorie .

L'étude portera sur les entreprises qui produisent aussi bien pour le marché national que pour le marché extérieur. En particulier nous nous intéressons aux sociétés traitant les fruits et légumes primeurs et de saison, les épices, colorants et condiments, l'olive et l'huile d'olive, les raisins et le vin et les fleurs.

L'enquête doit aboutir à dégager les éléments de base qui permettront la mise au point d'actions d'amélioration de la productivité du secteur et de l'efficience des employés de ces industries. Par la suite, des projets économiques et sociaux identifiés par cette étude seront financés dans le cadre du projet de la "Promotion de l'Agribusiness au Maroc" au profit des unités agro-industrielles en question.

METHODOLOGIE.-

Cette étude est basée sur un échantillon de soixante sociétés localisées dans les principales région de concentration de l'industrie horticole, à savoir: Berkane, Meknes, Fès, Larache, Casablance, Marrakech et Agadir.

Ces sociétés ont été choisies en fonction de leur branche d'activité (conserverie, stations de conditionnement et entrepôts frigorifiques) et selon leur taille. La taille est définie en fonction du nombre d'employés (y compris le nombre moyen de saisonniers par an) et classées comme suit:

- Grande entreprise : celle qui engage plùs de 200 travailleurs
- Moyenne entreprise: celle qui engage entre 50 et 199 travailleurs
- Petite entreprise: celle qui engage moins de 50 travailleurs

Dans chacune de ces sociétés nous allons appliquer deux types de questionnaires:

a) Une fiche d'enquête "Société" adressée aux directeurs des entreprises et destinée à dégager les caractéristisques de base de ces sociétés en termes de production réalisée et approvisionnements, commercialisation, structure de l'emploi et services sociaux accordés aùx travailleurs, évaluation de la performance des travailleurs et attitudes face aux diverses incitations de la productivité des travailleurs.

b) Une fiche d'enquête "Employés" adressée à un échantillon de travailleurs des entreprises choisies. Cette fiche a pour objectif de préciser les caractéristiques socio-démographiques des travailleurs, leur qualification et leur attitude face aux différentes conditions de travail affectant la performance des travailleurs , leur accès aux services sociaux et l'impact de l'emploi sur l'entourage familial.

Ultérieurement, nous allons réaliser une étude de cas concernant une trentaine de travailleurs pour approfondir certains aspects relevés dans les enquêtes précédentes.

Maria Neyra Faqir
Chef du Projet

ANNEX E

SURVEY CALENDAR FOR FIRM AND EMPLOYEE SURVEYS

CALENDRIER DEFINITIF DE REALISATION DES ENQUETES.

A. PRESENTATION :

Ce calendrier a été établi, en accord avec les Coordinateurs Régionaux, pour toutes les régions intéressées par l'étude. Il appelle les remarques suivantes :

1/. Ce calendrier concerne les enquêtes déjà effectuées et celles qui restent à faire. Pour ces dernières, les dates de réalisation des enquêtes ont été fixées avec l'accord des sociétés concernées.

Néanmoins, d'après l'expérience acquise, certaines dates peuvent être modifiées en raison des imprévus (voyage des responsables des sociétés ou arrêt temporaire des activites des sociétés, atermoiements...).

Les enquêtes programmées pour le mois de Mars 1993 concernent les sociétés qui ne débutent leurs activités qu'à partir de cette période.

Signalons que ce calendrier ne fait pas état des multiples contacts préalables qui ont dû avoir lieu avec les sociétés pour obtenir leur acceptation de l'enquête. D'ailleurs, ces contacts ont parfois abouti à un refus de la part des sociétés après de nombreux rendez-vous, ce qui nous a obligé à les remplacer dans notre échantillonnage.

2/. Pour certaines sociétés, l'enquête a été étalée sur plusieurs jours et cela en raison de :

- Pour la Fiche d'Enquête "Société", vu sa durée et le type de données recherchées, quelques directeurs ont demandé de fractionner les interviews.

- En ce qui concerne la Fiche d'Enquête "Employés", quelques sociétés ne voulaient pas que le personnel échantillonné soit enquêté simultanément par les différents enquêteurs afin de ne pas perturber la chaine de fabrication. Par ailleurs, à la demande des responsables des sociétés, il n'était pas possible d'enquêter aux heures de pause.

3/. Ce calendrier reflète l'état d'avancement des enquêtes. Dans l'ensemble, le programme d'enquêtes se déroule convenablement et dans les délais escomptés.

Il faut souligner que, vu la nature des informations recherchées, la collaboration du personnel des O.R.M.V.A. et D.P.A., participant à l'étude, s'est avérée d'une importance décisive pour obtenir l'acceptation de l'enquête par les industriels. En effet, ces organismes entretiennent des relations continuelles avec ces sociétés ce qui a permis de gagner leur confiance.

Ci-joint, sont présentés les tableaux des calendriers des réalisations des enquêtes par région.-

.../ calendrier

B) CALENDRIER DES ENQUETES PAR REGIONS.-

REGIONS	NOMS DES SOCIETES	FICHES D' ENQUETE "SOCIETE"	FICHES D' ENQUETES "EMPLOYES"
MEKNES	1) NORA	18-01-93	18 et 19-01-93
	2) LES HUILERIES DES MEKNES	19-01-93	REFUSE
	3) SODEA	22-01-93	23-01-93
	4) LES CELLIERS DE MEKNES (MEKNES VINS)	02-02-93	08-02-93
	5) AIT SOUALAH	03-02-93	08-02-93
FES.	1) SOFIAG	30-01-93	28-01-93
	2) SIOF	21-01-93	21 et 29-01-93
	3) SOMIO	20-01-93	20 et 30-01-93 et 02-02-93
	4) SICOPA	02-02-93	28-01-93 et 02-02-93
	5) MABROUKA	03-02-93	09-02-93
	6) BEN MAKHLOUF ABBAS	29-01-93	29-01-93
	7) MAROC CAPRES	08-02-93	10-02-93
BERKANE	1) PIMURSA	09-02-93	09-02-93
	2) COOP. ENNASR	05-02-93	05-02-93
	3) MADAGH	09 et 10-02-93	01-02-93
	4) SOCOBER	11-02-93	30-01-93

.../

.../ calendrier

REGIONS	NOMS DES SOCIETES	FICHES D' ENQUETE "SOCIETE"	FICHES D' ENQUETE "EMPLOYES"
LARACHE	COMPAGNIE INDUSTRIELLE DE LOUKKOS	05 et 08-02-93	Du 05 au 12-02-93
CASABLANCA	1) SESTA	15-01-93	18-01-93
	2) MAROC AGRUMES	19-01-93	20-01-93
	3) YAMAMA	21-01-93 et 09-02-93	21-01-93
	4) CLEMENTINE	26-01-93 et 08-02-93	26-01-93
	5) DELASSUS	25-01-93	28-01-93
	6) BERDI	16-01-93 et 08-02-93	02-02-93
	7) FRIGO TARIK	04-02-93 et 09-02-93	04-02-93
	8) VCR (VINAIGRERIE CHERIFIENNE REUNIES)	02-02-93	02-02-93
	9) SINCOMAR	08-02-91	04-02-93
	10) COVEM	15-02-93	15-02-93
	11) UMC	27-01-93	10-02-93
	12) SAHA	09-02-93	12-02-93
	13) UNIGRAL	04-02-93	04-02-93
	14) ETS. ROUSSEAU	Mars	Mars
MARRAKECH	1) TOP AGRO	19-01-93 et 07-02-93	19-01-93
	2) RIM MAROCAINE	04-02-93	04-02-93
	3) ElMANSOURI Hj. MOHAMED	04-02-93	Du 1er. au 10-02-93
	4) ZEGMOUZI	23-01-93	23-01-93
	5) ZEMRANI HERITIERS	16-01-93	16-01-93
	6) PAL MAROC	21-01-93	21-01-93
	7) SOMIA	01 et 02-02-93	Du 02 au 05-02-93
	8) IDRISSI	14-01-93	14-01-93

REGIONS	NOMS DES SOCIETES	FICHES D' ENQUETE "SOCIETE"	FICHES D' ENQUETE "EMPLOYES"
suite Marrakech			
	9) ZETOUN TALBI	18-01-93	18-01-93
	10) TOP FOOD MOROCCO	16 et 19-01-93	Du 16 au 29-01-93
	11) SOCOCEMA	22-01-93	22-01-93
	12) PLANT ATLAS	19-01-93	19-01-93
	13) NOVA FLEURS	25-01-93	25-01-93
AGADIR:	1) AZROU	12-01-93	13-01-93
	2) BOUCHOUKOU	14-01-93	15-01-93
	3) WAFA	14-01-93 et 21-01-93	16-01-93
	4) M'BROUKA	20-01-93	28-12-92 et 21-01-93
	5) AL BARAKA	22-12-92 et 22-01-93	22-01-93
	6) AGRUMAR	23-01-93	23-01-93
	7) TOUZAIKOU	25-01-93	29-01-93 et 09-02-93
	8) COPAG	27-01-93	27-01-93
	9) PACK SOUSS	28-01-93 et 05-02-93	28-01-93 05-02-93
	10) ARBOR SUD	24-12-92 et 30-01-93	30-01-93
	11) BOUSTANE	02-02-93	02-02-93
	12) NECTAR PRIM	02-02-93	02-02-93 et 04-02-93
	13) IRO	16-02-93	16-02-93
	14) AGRITRADE	09-02-93	09-02-93
	15) JOUBIR	01-02-93	01-02-93
	16) TAKAD	29-01-93	29-01-93
	17) COFRUSOUSS	Mars	Mars
	18) SOCAMAR	15-02-93	15-02-93

ANNEX F

METHODOLOGY USED TO CHECK DATA SET: ENTERPRISE LEVEL

Le travail élaboré consiste en un contrôle par sondage des fiches de chiffrement établies par les divers agents, pour l'enquête Sociétés. Le travail de contrôle vise à atteindre des objectifs, s'appuie sur des hypothèses de base et admet un soubassement théorique que traduit la méthodologie utilisée.

1. OBJECTIFS VISES :

Le travail demandé a pour objectif de contrôler le chiffrement et/ou la saisie faits par les divers agents sollicités à cet effet. La méthode utilisée vise à répartir l'erreur qui peut entacher les données brutes, compte tenu des différentes variables qui se conjuguent pour l'engendrer. Celles-ci peuvent être dûes soit à :

- L'expérience acquise par chaque agent, au niveau d'un travail similaire qu'il a effectué antérieurement, d'où ce qu'on a appelé "les coefficients de qualité".

- La nature des questionnaires propres à chaque région enquêtée. Ainsi ceux de la région d'Agadir sont considérées comme relativement plus faciles à transcrire vu la parfaite connaissance des unités enquêtées sur place, par les agents de chiffrement.

- L'ordre chronologique de transcription des fiches pour chaque agent. En effet, après une période d'initiation au travail de chiffrement, vient la phase dite "moyenne" où l'agent est plus appliqué avant de passer à la phase finale où le rendement décroit suite à la lassitude qui atteint l'agent au terme de son travail.

Ces variables prises en compte, chaque agent reçoit un jeu de fiches à contrôler et reporte sur une fiche appropriée, les erreurs qu'il a notées. L'analyse de ces fiches de contrôle, permet de dégager une tendance générale pour juger du travail de transcription pour chaque agent et donc les corrections à apporter à son travail.

2. HYPOTHESES DE BASE :

Elles permettent de restreindre le champs où les erreurs sont recherchées. Ainsi on a supposé que :

- Les erreurs signalées relèvent de la transcription et non du questionnaire.

- Elles peuvent être soit dûes à un manque de concentration de l'agent (et dites alors erreurs d'inattention) soit à une mauvaise assimilation des instructions contenues dans la fiche codification. Dans ce cas, l'agent a tendance à répeter les mêmes erreurs au niveau de différentes variables, elles sont alors dites des erreurs systématiques.

- Les coefficients de qualités (pour les agents comme pour les régions) constituent autant de pondérations pour rechercher les erreurs. Ainsi l'agent qui a le plus haut coefficient, verra son travail contrôlé de façon proportionnelle, dans une proportion moindre que celui qui s'est vu affecté le plus bas coefficient.

- L'ordre chronologique de transcription est pris en compte pour tirer l'échantillon à contrôler. Ainsi le début comme la fin du travail de transcription seront plus représentés dans l'échantillon, par rapport à la date médiane.

3. METHODOLOGIE UTILISEE :

Un dépouillement des "fiches de contrôle" par agent, a permis de dresser un tableau à double entrée où sont :

- En lignes : le nombre de fiches transcrites par agent et par régions.

- En colonnes la répartition des fiches par régions.

Sont alors appliqués les coefficients de qualité (agent et région) pour pondérer les effectifs de fiches traitées à l'intérieur du tableau (coefficient région) et le nombre total de fiches par agent (coefficient agent). On obtient alors un tableau de contingeance en répartissant l'échantillon à travers les cases du tableau et au prorata (en %) du contenu de chaque case.

La taille de l'échantillon a d'abord été fixée à 20 % des fiches traitées avant de subir des redressements dûs à :

- L'unicité de la fiche "LARACHE" qui a été ajoutée à l'échantillon contrôlé puisque représente à elle seule toute une région.

- L'application des pondérations et le calcul du contenu des cases du tableau de contingeance, a nécessité quelques redressements pour faire ressortir certaines valeurs négligeables à l'état brut.

On opte alors pour un échantillon final de 16 fiches à contrôler, quant aux numéros de série, ils découlent d'un tirage au hasard au sein du jeu de fiches transcrites par région et pour chaque agent.

Les erreurs détectées et reportées sur "le tableau signalétique des erreurs" sont ensuite corrigées au niveau des données brutes avant de servir comme support à décider des corrections à apporter au travail de chaque agent. "La typologie des erreurs" a servi grandement à décider des corrections requises, ainsi a-t-on distingué deux catégories d'agents :

- Ceux dont le travail a été entièrement revu, car les erreurs commises étaient essentiellement celles d'inattention.

- Ceux qui commettent des erreurs systématiques et qui ont vu leur travail revu au niveau de quelques questions (groupes de variables) et pour toutes les fiches.

5. DOCUMENTS DE SUPPORT :

1. Modèle de la "fiche de contrôle"
2. Modèle du "tableau signaletique des erreurs"
3. Modèle de la "typologie des erreurs"
4. Liste des numéros de serie à contrôler (l'échantillon tiré).
5. Les divers modèles (cités plus haut) tels qu'ils ont été remplis.

NUMEROS DE SERIE A CONTROLER.

KHYARI :

- 0405
- 5602
- FICHE LARACHE.

EDDEKKAKI :

- 0408
- 0205

HARBI :

- 5501
- 0208

BAKKALA :

- 0815
- 0403
- 0412
- 0201
- 0203
- 0212
- 0213

FRIZ ET MANIAR :

- 0803
- 0411

TYPOLOGIE DES ERREURS

(1) : Codification erronnée (ex : on met (5) au lieu de (6), erreur de précipitation, d'inattention).

(2) : Report de chiffres ou de noms erronés (exclusion à faire des erreurs d'orthographe pour les noms) .

(3) : Oubli non justifié (ex : on laisse la case vide alors que le code zéro qui est implicitement à reporter dans la case, ne correspond pas au vrai code à écrire) .

(4) : Non respect de l'ordre de classement des variables sur le plan de chifrement (ex : on codifie VAR 1 avec les codes de VAR 2 qui vient juste aprés VAR 1, on mélange entre codes réservés à plusieurs variables).

(5) : Erreur de raisonnement sur le regroupement des réponse (ex : on a tendance à trop utiliser le code qui correspond à la réponse " AUTRE ") .

(6) : Autre erreur non spécifiée ci-haut .

FICHE DE CONTROLE

- NOM DE L'AGENT : FRIZ ET MANIRA
- NOMBRE DE QUESTIONNAIRES TRAITES : 129
- DATE DEBUT TRANSCRIPTION : 16-4-93
- DATE FIN TRANSCRIPTION : 28-4-93
- COEFFICIENT DE QUALITE : 2
- REPARTITION DES FICHES TRAITEES PAR REGION :

EGION	AGADIR	MARRAKECH	CASA	MEKNES	FES	BERKANE	LARAC

- Numéro de serie des fiches traitées par région et par ordre chronologique de traitement .

RDRE HRONOLOGIQUE : TRAITE- ENT	REGION	NBRE. DE SOCIETES	REFERENCE	NBRE. D'ENQUETES PAR SOCIETE
1	Agadir	2	0816	10
2			0803	20
3	Marrakech		0401	30
4		3	0411	20
5			0413	14
6	Berkane	2	0601	12
7			0604	23
		7		129

(7) - Berkane (6) - Larache (5) - Marrakech - Casa - Fès - Meknès (I)

FICHE DE CONTROLE

- NOM DE L'AGENT : EDDEKAKI Lhadja
- NOMBRE DE QUESTIONNAIRES TRAITES : 163
- DATE DEBUT TRANSCRIPTION : 5-4-93
- DATE FIN TRANSCRIPTION : 23-4-93
- COEFFICIENT DE QUALITE : 1
- REPARTITION DES FICHES TRAITEES PAR REGION :

REGION	AGADIR	MARRAKECH	CASA	MEKNES	FES	BERKANE	LA
iches raitées	0811 0817 0819 0807 0810 0808 6	0408 0404 2	0205 0404 2	0	5609) 1	0	

- Numéro de serie des fiches traitées par région et par ordre chronologique de traitement .

ORDRE CHRONOLOGIQUE DE TRAITEMENT	REGION	NBRE. DE SOCIETES	REFERENCE	NBRE. D'ENQUETES PAR SOCIET
1			0811	10
2			0817	20
3	Agadir	6	0819	5
4			0807	10
5			0810	10
6			0808	20
7	Marrakech	2	0408	10
8			0404	17
9	Casa	2	0205	20
10	Fès	1	5603	21
		11		163

FICHE DE CONTROLE

- NOM DE L'AGENT : BAKKALA Malika
- NOMBRE DE QUESTIONNAIRES TRAITES : 113
- DATE DEBUT TRANSCRIPTION : 16-4-93
- DATE FIN TRANSCRIPTION : 26-4-93
- COEFFICIENT DE QUALITE : 2
- REPARTITION DES FICHES TRAITEES PAR REGION :

REGION	AGADIR	MARRAKECH	CASA	MEKNES	FES	BERKANE	LAA
es tées	0815/1	0403 0409 0412	0201 0206 0203 0211 0212 0213	0	0	0	

- Numéro de serie des fiches traitées par région et par ordre chronologique de traitement .

ORDRE CHRONOLOGIQUE DE TRAITEMENT	REGION	NBRE. DE SOCIETES	REFERENCE	NBRE. D'ENQUETES PAR SOCIETE
2	Agadir	1	0815	10
1	Marrakech	3	0403 0409 0412	17 15 21
5 6 7 8 9 10	Casablanca	6	0201 0206 0203 0211 0212 0213	10 10 10 10 10 10
otal		10		113

FICHE DE CONTROLE

- NOM DE L'AGENT : KHYARI NourEddine
- NOMBRE DE QUESTIONNAIRES TRAITES : 218
- DATE DEBUT TRANSCRIPTION : 5-4-93
- DATE FIN TRANSCRIPTION : 26-4-93
- COEFFICIENT DE QUALITE : 1
- REPARTITION DES FICHES TRAITEES PAR REGION :

REGION	AGADIR	MARRAKECH	CASA	MEKNES	FES	BERKANE	LAR
ches aitées	0805 0809 0804 0813 0814	0407 0405 0406	0210	-	5604 5602 5601 5606	1	060

- Numéro de serie des fiches traitées par région et par ordre chronologique de traitement .

ORDRE CHRONOLOGIQUE DE TRAITEMENT	REGION	NBRE. DE SOCIETES	REFERENCE	NBRE. D'ENQUETES PAR SOCIETE
2	Agadir	5	0805	10
3			0809	5
4			0804	10
			0813	11
			0814	12
1	Marrakech	3	0407	27
7			0405	5
8			0406	23
9	Casablanca	1	0210	20
10			5604	10
11	Fès	4	5603	5
12			5601	10
13			5606	10
14	Larache	1	1	38
15	Berkane	1	0603	22
TOTAL		15		218

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : EDDEKAKI Khadija
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR : ANNAL Nour Eddine

FICHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
02	18	C.F.A.B.					X	
		R.N.T.P.						
		C.F.A.B.D.						
		E.N.T.P.D.						
	Page 14	Identification	X					
13	14	C.D.C.T.						X
08	18	C.F.A.B.		X				
	18	C.F.A.B.D.						
07	9	A.G.R.T.						X
		PRINT						X
		ACAPI						X
5	17	O.C.A.O.M	X					

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : HARBI
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR : KHYARI N.

FICHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
0405	5	DATEM	X					
		CETR	X					
		POCAP	X					
0202	8	C.A.E	X					
0405	9	OLFCPP				X		
		EPFP						
		CONDEP						
		TOMEXP						
		VINFP						
	9	PRIF				X		
		VARIABLE						
		FRACFD						
	13	RESNM			X			
	14	MMMV						X
	15	CHARGT	X					
	16	EMSNQF	X					
	19	MMASA	X					
	29	INSTAD)						
		COMTAD)						
		RELAD)	X					
		STAD)						
		AUTEVAD)						
	31	FORNREC	X					
209	19	MMASA	X					
	13	RESNM	X					
202	9	OLCF & HOLF	X					
	13	RESNM			X			
	31	ENPESEN-FNPEFO						
	31	ENPELS-FNOTAS			X			
		FNTETAS						
		PCPER						
503	9	VINF						

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : KHAIYARI + ANNAL
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR : HAREI

CHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des croix)					
			(1)	(2)	(3)	(4)	(5)	(6)
2	1	ACTIVITE	X					
	5	POCAP			X			
		PORIG			X			
		DATEFE			X			
		DATEFN			X			
	6	LIEF			X			
	13	RESM						X
5	1	ACTIVITE	X					
	9	CONDF			X			
		CONDM			X			
		CONDFD			X			
		CONDFP			X			
		CONDFE			X			
		CONDFA			X			
	14b	C90			X			
		C91			X			
		C92			X			
		CEX			X			
	9	CONDT			X			
		CONDF			X			
		CONDFM			X			
		CONDFD			X			
		CONDFP			X			
		CONDFE			X			
	11	CONDC			X			
	12	CCAPI			X			
		CCAPU			X			
	14	C90			X			
		C91			X			
	14	C92			X			

//ABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : ANNAL Nour Eddine
- NOMBRE DE FICHES CONTROLEES : 5
- NOM DU CONTROLEUR : EDDEKAKI KHADIJA

ICHE N°	QUESTION N°	NOM DE LA VARIABLE (où il y a erreur)	TYPE ERREUR (Mettre des croi)					
			(1)	(2)	(3)	(4)	(5)	(6)
203	Q9	PRIF	X					
	Q11	CONDC			X			
	Q12	PCAP	X					
		CCAPI	X					
		PCAPU	X					
		CCAPU	X					
	Q18	CFAB	X					
		INFR	X					
		INFRD	X					
		CFABD	X					
	Q23	CMATOC	X					
501	Q9	EPICE	X					
		CONDF	X					
		FRUIF	X					
		CONDEM	X					
		FRUIFM	X					
		CONDFD	X					
		FRUICFD	X					
		FLFP	X					
		OLFCFD	X					
		CONDFD	X					
		FRUIEFP	X					
		CONDFE	X					
		LEGCFE	X					
		CONDFA	X					
		FRUICFA	X					
01	Q21	REMSOF	X					
		REMSNQM	X					
		REMSNQF						
	Q23							

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : NOUR EDDINE ANNAL
- NOMBRE DE FICHES CONTROLEES : 5
- NOM DU CONTROLEUR : EDDEKAKI KHADIJA

CHE °	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
	Q31	FNPETAS		X				
	Q32			x				
03	Q9	EPICE	X					
		CONDFM	X					
		FRUIEFM	X					
		FUIICFD	X					
		CONDFD	X					
		CONDFP	X					
		FRUIEFP	X					
		CONDFE	X					
		FRUICFE	X					
	Q12	OCAPU	X					
		HCAPU	X					
	Q18	ENTP	X					
		ENTPD	X					
	Q31c Tous		X					
	Q9	PRIFD	X					
	Q 31c Tous			X				
	P2 :	ID	X					
		ACEP	X					
		CONSE	X					
	P3	ID	X					
		TOMEF	X					
	P4	ID	X					
	P5	ID	X					
	P6	ID	X					
	P7	ID	X					
	P8	ID	X					
	P9	ID	X					

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT : **ANNAL NOUR EDDINE**
- NOMBRE DE FICHES CONTROLEES : **5**
- NOM DU CONTROLEUR : **EDDEKAKI KHADIJA**

FICHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
	P10	ID	X					
	Q11	ID	X					
	Q12	ID	X					
	P19	ID	X					
	Q18	ENTP		X				
		ENTPD		X				
	P13	ID	X					
	P13	ID	X					
	Q20	AUTMODR	X					
	P15	ID	X					
	Q21	REMTF	X					
		REMADH	X					
		REMADF	X					
		REMQH	X					
		REMQF	X					
		REMNQH	X					
		REMNQF	X					
		REMSQH	X					
		REMSQF	X					
		REMSNQH	X					
		REMSNQH	X					
	P16	ID	X					
	P17	ID	X					
	P18	ID	X					
	P19	ID	X					
	Q30	AURE		X				
	P20	ID	X					
	P21	ID	X					

/ABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT :
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR :

ICHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
03	Q26	DELEG	X					
		NBREUND	X					
		DCONDT	X					
	Q29	QTE	X					
		CATE	X					
		SATE	X					
		RELTE	X					
		ASTE	X					
		AUTE	X					
08	Q8	CA	X					
	Q29	QPANTPE			X			
		QALITPE			X			
		ASDPE			X			
		DISCPE			X			
	Q31	Tous FNPETAS	X					
		ENTEFLS						
16	Q19	MMASA	X					
	Q20	CASAIH	X					
		CASAIF	X					
		LASAIH	X					
		LASAIF	X					
	Q29	QUANTPE			X			
		QUALITPE			X			
		ASPE			X			
		DUPE			X			
		AUTEVPF			X			
19	Q20	DIMOH	X					
		DIMOF	X					
	Q29	QUATPF	X					

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT :
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR :

FICHE N°	QUESTION N°	NOM DE LA VARIALE (où il y a erreur)	TYPE ERREIR (Mettre des crois)					
			(1)	(2)	(3)	(4)	(5)	(6)
211	Q31	FCPEOS	X					
		FCTEAUT	X					
		AUT	X					
	Q32	UMAT	X					
		UTG	X					
204	P2	ID	X					
	P3	ID	X					
	P4	ID	X					
	P21	ID	X					
	Q13	RESM			X			
	Q20	DIMOF	X					
	Q21	REMTH						
		REMSNQF	X					
	Q31	FCPEOS	X					
		FCTEAUT	X					
502	Q9	HUIL	X					
	Q23	CMATTE	X					
	Q29	QUANTPE			X			
		QATITPE			X			
		ASDPE			X			
		DISCPE			X			
		AUTEVPE			X			
		AUTPE			X			
	Q30	PRRE			X			
		AURE			X			
	Q31	FCPEOS			X			
		FCTEAUT			X			
		FCPE			X			
		AUT			X			
	Q32	UMAT			X			
		PERTS			X			
		GEST			X			
		AUTG			X			

TABLEAU SIGNALETIQUE DES ERREURS

- NOM DE L'AGENT :
- NOMBRE DE FICHES CONTROLEES :
- NOM DU CONTROLEUR :

QUESTION N°	NOM DE LA VARIABLE (où il y a erreur)	TYPE ERREUR (Mettre des crois)					
		(1)	(2)	(3)	(4)	(5)	(6)
Q9	CAPRIM	X					
	CONSE	X					
Q11	RAISC	X					
Q44	QEREX	X					
Q20	CASAIH	X					
	CASAIF	X					
	LASAIH	X					
	LASAIF	X					
Q27	PERPEH	X					
	PEROCF	X					
Q29	QALITPE	X					
	AUTEVPE	X					
• <u>Tous</u> Q29							
• <u>Tous</u> Q31 jusqu'à FCPER							

ANNEX G

QUESTIONNAIRES: ENTERPRISE, EMPLOYEE, AND CASE STUDY

ROYAUME DU MAROC
INSTITUT AGRONOMIQUE ET
VETERINAIRE HASSAN II
******
COMPLEXE HORTICOLE D'AGADIR

USAID

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE ORIENTEE VERS L'EXPORTATION

FICHE D'ENQUETE SOCIETES

N° :

ACTIVITE : [ ] CONSERVERIE

[ ] CONDITIONNEMENT

[ ] STOCKAGE

COORDINATEUR :

ENQUETEUR :

DATE :

REGION :

1992-1993

IDENTIFICATION DE LA SOCIETE

1. Nom de la Société ou Raison Sociale : _____

_____

2. Adresse : Siège social : Province _____
CR./Ville _____
Douar/Quartier _____
Rue, N° _____
Tel : _____ Fax : _____ Telex : _____
Unité de Production : Province _____
CR./Ville _____
Douar/Quartier _____
Rue, N° _____
Tel : _____ Fax : _____ Telex : _____

3. Statut Juridique de la Société :
[ ] Personnel [ ] Société Anonyme
[ ] S.A.R.L. [ ] Coopérative
[ ] Semi-publique (Etat) [ ] Autres

4. Date de création (année) : _____

5. Origine des investissements :

5a) Société à 100% nationale [ ] Oui [ ] Non

5b) Société mixte (capitaux nationaux et étrangers)?
[ ] Non [ ] Oui Depuis quand? _____
% de la participation étrangère dans le capital de la société _____
Pays d'origine des capitaux étrangers _____

5c) Etes-vous une filiale d'une société étrangère?
[ ] Non [ ] Oui
Pays d'origine _____
Nom de la société mère _____
Depuis quand? _____

) Etes-vous une filiale d'une société nationale?
[ ] Oui [ ] Non
Si oui, de quelle entreprise? _____
Depuis quand? _____

) Autres : _____

Avez-vous de filiales? [ ] Oui [ ] Non
Si oui, où? _____
Lesquelles? _____

Y a-t-il un Conseil d'Administration de la Société?
[ ] Oui [ ] Non
Si oui, nombre de membres masculins : _____
Nombre de membres féminins : _____

Chiffre d'affaires en DH
en 1991-1992 : _____
dont part à l'export (%) _____

9. Activités Economiques (1991-1992) :

a) Principale : _____

b) Autres : _____

Matières Premières Horticoles Traitées*		Produit Final**		Marque Commerciale	Année de début de production	% Marché Extérieur	Pays Importateur
Désignation	Tonnes (T)	Désignation	(T)***				

* Dans le cas de stations de conditionnement ou entrepôts frigo : indiquez le tonnage receptionné par la station ou frigo (tout venant) des produits horticoles (tomates, agrumes, fleurs ...)

** Pour les usines : produit final = produit transformé (ex. concentré de tomate).
Pour les stations et entrepôts : produit final = produits commercialisables sur les marchés intérieur et extérieur.

*** Pour les fleurs, on peut indiquer nombre de tiges.

.0. Approvisionnement en matières premières

.0a) Quelles modalités d'approvisionnement utilisez-vous?
Indiquez en pourcentages :

Désignation	%
Marché libre (achats)	
Contrats à long terme avec des agriculteurs (2 campagnes agricoles ou plus)	
Contrats à court terme avec des agriculteurs (une seule campagne agricole)	
Ferme intégrée à la société	
Production des adhérants de l'entreprise (en cas de coopérative)	
Autres (précisez) :	
TOTAL	100

10b) Lieux d'approvisionnement :

1) Sur la même région où la société est installée :
   - 100 %
   - en partie ____ %

2) Autres régions (lesquelles?) (indiquez % par région :
   Haouz, Souss, etc.) _____

_____

_____

10c) Avez-vous des difficultés d'approvisionnement en matières premières?

beaucoup [ ] peu [ ] aucune [ ]

11. Calendrier de fonctionnement de la société : Périodes d'activité (indiquez le mois)

Matières Premières	Début	Fin	Pointe

12. Capacité de production de la société

Désignation (Matière Première)	Désignation (Produit Final)	Capacité installée (T)		Capacité utilisée Totale 1991-92 (T)
		Total	Journalière	

13. Projetez-vous de mécaniser davantage votre unité?
N.B. Il s'agit de l'automatisation des opérations existantes dans la chaine de fabrication.
[ ] Oui [ ] Non
Pourquoi? _____
_____

14. Commercialisation de la production

14a) Modalité de commercialisation extérieure (à l'étranger) (en % du total commercialisé) :

Désignation	Contrat à court terme (1 an)	Contrat à long terme (2 ans et plus)	Sans contrats
.Commercialisation directe avec des clients étrangers			
.Opérateurs privés marocains			
.Commissionnaires étrangers			
.Groupes d'exportation			
.Transformation et exportation intégrée			
.Autres			

14b) Evolution des exportations (3 dernières années) (Tonnage)

Produit Final	1991/92	1990/91	1989/90

14c) Projetez-vous d'accroître vos exportations pour l'année prochaine?

[ ] Oui

[ ] Non

[ ] Je ne peux pas prédire le futur

Si oui : Produits finis concernés :

_____

_____

_____

Montant de l'investissement (en DH) : _____

15. Total (DH) des coûts de production (charges totales) 1991-1992 _____

EMPLOI ET PRODUCTIVITE

16. Personnel employé (effectifs) (1991-1992)
N.B. Si une personne a plusieurs fonctions, elle doit être classée dans la plus importante catégorie et porter en observation les autres postes occupés.

Catégories	Hommes	Femmes	Total	Autres Fonctions
• Directeurs (managers)				
• Cadres administratifs				
• Cadres techniques				
• Personnel administratif				
• Employés permanents				
Qualifiés				
Non-qualifiés				
• Employés saisonniers (nombre moyen/an)				
Qualifiés				
Non-qualifiés				

17. Périodes d'utilisation des occasionnels (1991-1992)
Indiquez effectifs moyens/mois

Mois	Hommes	Femmes	Total
Janvier			
Février			
Mars			
Avril			
Mai			
Juin			
Juillet			
Aout			
Septembre			
Octobre			
Novembre			
Décembre			

Nombre maximum des occasionnels par jour au cours de la campagne de travail (le pic) :

Hommes _____ Femmes _____

18. Cadres techniques (énumérez chaque cadre)

Fonction actuelle	Diplôme (1)

(1) Diplôme: Agent Technique; Adjoint technique; Ingénieur; Centre de Formation Professionnelle; Licencié; Maitrise; IIIème cycle.

19. Masse salariale (salaire et charges sociales) de la société:

	1991-92
Montant de la masse salariale	
% de la masse salariale sur les charges totales	

20. Recrutement de la main d'oeuvre

20a) Modalité de recrutement de la main d'oeuvre : indiquez le % par rapport au total

Modalités	Permanents		Saisonniers	
	H	F	H	F
. Engagement de la même main d'oeuvre chaque année				
. Par liste d'attente				
. Sélection parmi les demandeurs d'emploi quotidiens				
. Par recommandation				
. Relations familiales				
. Recours à un intermédiaire spécialisé				
. Recrutement dans des lieux ou régions particulières				
. Autres (à préciser) :				
TOTAL	100%	100%	100%	100%

20b) Avez-vous des difficultés pour recruter la main d'oeuvre?

Femmes: [ ] Oui [ ] Non Hommes: [ ] Oui [ ] Non

Si oui, à quelle période de l'année?

Femmes: _____ Hommes: _____

Pourquoi? _____

_____

1. Remplacement du personnel: Indiquez le pourcentage de nouveaux employés durant la dernière année par rapport au total par sexe.
   N.B. Les occasionnels qui retournent chaque année ne sont pas considérés comme des nouveaux.

Catégories	1991-92	
	H	F
Personnel technique et Directeur		
Personnel administratif		
Ouvriers permanents Qualifiés Non-qualifiés		
Ouvriers saisonniers Qualifiés Non-qualifiés		

22. Absentéisme : Estimez le % d'employés qui se sont absentés durant les jours de travail de l'entreprise par catégorie.

	Permanents		Occasionnels		Personnel administratif		Personnel Technique et Cadres	
	M	F	M	F	M	F	M	F
1991-1992								

23. Accordez-vous des congés de maternité au personnel?
[ ] Oui [ ] Non
Si oui, précisez par catégorie (P = payés; NP = non-payés)
. Permanents [P] [NP]
. Occasionnels [P] [NP]
. Personnel Administratif [P] [NP]
. Personnel Technique et Directeur [P] [NP]

24. Est-ce que l'entreprise assure des services de crèches, gardiennage des enfants ou autres similaires aux enfants des employés?
. Ouvriers Permanents [Oui] [Non]
. Ouvriers Saisonniers [Oui] [Non]
. Personnel Administratif [Oui] [Non]
. Personnel Technique et Directeur [Oui] [Non]

25. Y a-t-il un ou plusieurs syndicats des travailleurs de la société? [ ] Oui [ ] Non
Si oui,

25a) Nombre de réunions par an auxquelles vous assistez _____

25b) Enumérez les trois principaux sujets de discussion entre ces syndicats et vous?

_____

_____

_____ _____

26. Y a-t-il un ou des délégué(s) du personnel.
[ ] Oui [ ] Non
Si oui,

26a) Nombre de réunions par an auxquelles vous assistez? _____

26b) Enumérez les trois principaux sujets de discussion entre ces délégués du personnel et vous?

_____

_____

_____

27. Quel est le % de pertes de produits résultant de la performance des travailleurs?

Occasionnel		Permanent		Total
M	F	M	F	
				100%

28a) A votre avis, quelles sont les incitations susceptibles d'améliorer la productivité des travailleurs?

Désignation	Important	Peu important	Aucune importance
Meilleurs salaires			
Primes individuelles			
Primes collectives			
Assurances (santé, accident, incapacité)			
Retraite			
Transport domicile-lieu de travail			
Congés de maternité			
Services de planification familiale			
Gardiennage des enfants			
Assurance santé pour enfants			
Services des urgences médicales			
Restaurant/foyer d'entreprise			
Séparation des tâches par sexe			
Possibilité d'avancement de carrière			
Crédit/épargne offert par la firme			
Relations amicales entre travailleurs			
Agencement des horaires/pauses			
Amélioration de l'aération/lumière des locaux			

8b) De cet ensemble d'incitations à la productivité du travail, citez les 3 meilleures par ordre d'importance dégressif :

1. _____
2. _____
3. _____

29. Evaluez-vous la productivité du personnel (pour les différentes catégories) : [ ] Oui [ ] Non

Si oui, comment?

Ouvriers permanents _____

_____

Ouvriers saisonniers _____

_____

Personnel administratif _____

_____

Cadres Techniques et Directeurs _____

_____

30. Récompensez-vous distinctement les ouvriers/ouvrières performants? [ ] Oui [ ] Non

Si oui, comment?

_____

_____

_____

Si non, pourquoi?

_____

_____

31. Politique de formation

31a) La société pratique-t-elle un système de formation pour les nouveaux recrutés?

[ ] Oui [ ] Non

Si oui, indiquez quel système par catégorie :

Catégories	Sur le tas	Stage dans l'entre-prise	Organismes spécialisés	Fournisseurs de matériel et produits	Autres
Ouvriers permanents					
Ouvriers saisonniers					
Personnel administratif					
Cadres Techniques et Directeurs					

31b) Y a-t-il un programme de formation continue pour le personnel? [ ] Oui [ ] Non

Si oui, indiquez lequel par catégorie :

Catégories	Organismes spécialisés	Fournisseurs de matériel	Autres entreprises performantes	Autres (à préciser)
Ouvriers permanents				
Ouvriers saisonniers				
Personnel administratif				
Cadres Techniques et Directeurs				

31c) Etes-vous favorable à un système de formation continue pour le personnel? [ ] Oui [ ] Non

Si oui, pour quelle catégorie de personnel? _____

Quel système de formation? _____

_____

32. Quel genre d'assistance technique aimeriez-vous recevoir pour améliorer la performance des travailleurs? _____

_____

_____

ROYAUME DU MAROC
INSTITUT AGRONOMIQUE ET VETERINAIRE
HASSAN II
****
COMPLEXE HORTICOLE D'AGADIR

USAID

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE ORIENTEE VERS L'EXPORTATION

FICHE D'ENQUETE EMPLOYES
No.

SOCIETE :

REGION :

ACTIVITE : [ ] CONSERVERIE [ ] STOCKAGE
[ ] CONDITIONNEMENT

COORDINATEUR :

ENQUETEUR :

DATE D'ENQUETE :

1992-1993

INFORMATIONS GENERALES

1. Nom, Prénom _____

_____ _____

2. Sexe : [ ] Féminin [ ] Masculin

3. Age : _____ ans

4. Lieu de naissance :

a Province : _____

b Ville ou Douar : _____

5. Lieu de résidence :

5a) Adresse actuelle : _____

_____

5b) Adresse permanente : _____

_____

5c) Lieu de résidence au cours des 10 dernières années (villes ou provinces) _____

_____

_____

_____

5d) Pour travailler dans cette société, étiez-vous obligé(e) de changer de région de résidence? [ ] Oui [ ] Non

6. Situation familiale

[ ] Célibataire [ ] Divorcé(e)

[ ] Veuf(ve) [ ] Marié(e)

Si marié(e) : [ ] cohabitant avec l'époux(se)

[ ] séparés

Nombre d'enfants : _____

8. Education

8a) Avez-vous fréquenté l'école? [ ] Oui [ ] Non

8b) Si non, savez-vous lire?
[ ] en arabe
[ ] en français
[ ] en français et en arabe

8c) Si vous avez fréquenté l'école, précisez le niveau de scolarisation atteint :
[ ] école coranique
[ ] école primaire incomplète
[ ] école primaire complète
[ ] école secondaire incomplète
[ ] école secondaire complète
[ ] centre de formation professionnel
[ ] études universitaires

8d) Avez-vous un (des) diplôme(s) universitaire(s) professionnel? [ ] Oui [ ] Non
Si oui, le(s) quel(s)?
_____
_____
_____

8e) Avez-vous une spécialisation technique? [ ] Oui [ ] Non
Si oui, laquelle? _____
_____

EMPLOI

9. Situation contractuelle : Etes-vous engagé(e) en tant que:
   [ ] travailleur permanent
   [ ] travailleur saisonnier
   [ ] travailleur contractuel

10. Date d'entrée dans la société :

10a) Pour les permanents : Depuis quand travaillez-vous dans cette société? (Indiquez une seule réponse, ex. 10 jours ou 2 mois ou 3 ans)

_____ jours, ou
_____ mois, ou
_____ années

10b) Pour les saisonnier(es) qui reviennent chaque année dans cette société, indiquez depuis combien d'années :

_____ années

10c) Pour les nouveaux saisonniers : indiquez depuis combien de temps travaillez-vous dans cette société :

_____ jours, ou
_____ mois

10d) Pour les contractuels, indiquez la durée du contrat:

_____ en jours, ou
_____ en mois, ou
_____ en années

11. Quel est votre poste actuel? (ex. gérant, chef de fabrication, secrétaire, superviseur, caporal, ouvrier, etc.)

_____

12. Précisez le type de travail que vous réalisez (soulignez la spécialisation qui occupe le plus le temps de travail de l'employé) :

12a) Pour les travailleurs permanents et saisonniers :

[ ] Manipulation légère (calibrage, triage, lavage, coupe, pesage ...)

[ ] Emballage (mise en boites, mise en bottes, mise en carton, étiquetage)

[ ] Manipulation lourde (transport de caisses/boites, palettisation, chargement/déchargement de camions ...)

[ ] Transport

[ ] Contrôle et mise en marche des machines et des véhicules

[ ] Supervision

[ ] Autres (précisez) : _____

_____

12b) Pour les cadres :

1) Précisez votre fonction : (responsable d'une chaine de fabrication, d'un département, etc.) _____

_____

2) Combien d'employés supervisez-vous? _____

3) Evaluez-vous le produit de ceux que vous supervisez?

[ ] Oui [ ] Non

Si oui, citez les critères d'évaluation que vous utilisez:

_____

_____

_____

- Si vous êtes <u>saisonnier</u>, quels autres emplois avez-vous occupés durant les 12 derniers mois? (Si nécessaire, marquez plusieurs réponses):
  [ ] autres entreprises de post-récolte horticoles
  [ ] autres industries alimentaires (poissons, etc.)
  [ ] industries non alimentaire
  [ ] commerce
  [ ] service domestique
  [ ] agriculture
  [ ] autres (indiquez) : _____

  _____

- Etes-vous informé(e) à l'avance de votre programme de travail? [ ] Oui [ ] Non
  Si oui, combien de jours à l'avance? _____ jours

- <u>Recrutement</u> : Comment étiez-vous recruté(e) dans cette société? (La première fois)
  [ ] Je suis engagé(e) chaque année par cette société
  [ ] J'étais selectionné(e) sur la liste d'attente de la société
  [ ] J'étais recommendé(e) par quelqu'un qui travaille dans cette société
  [ ] J'étais recruté(e) dans ma région d'origine ou dans un lieu particulier
  [ ] Je me suis présenté(e) à la porte de la société
  [ ] Un membre de ma famille m'a recommendé(e)
  [ ] Un intermédiaire m'a engagé(e)
  [ ] Je ne sais pas
  [ ] J'étais recruté(e) par la société après interview
  [ ] Autres (à préciser) : _____

  _____

16. <u>Remunération</u> :

16a) Comment êtes-vous remunéré(e) : à l'heure, par jour ou par mois de travail et combien? (1991-1992)?

à l'heure _____ DH

ou par jour _____ DH

ou par mois _____ DH

16b) Quel est votre temps moyen de travail dans cette société (1991-1992)?

Nombre d'heures de travail par jour _____

Nombre de jours de travail par mois _____

Nombre de mois de travail par an _____

16c) Estimez votre salaire annuel (1991-1992) _____

Lieux de travail	Désignation	Taux moyen mensuel	Durée de service (en mois)	Total
L'ENTRE-PRISE ENQUETEE	SALAIRE PRIMES ALLOCATIONS			
Sous-Total				
AUTRES ENTRE-PRISES OU ACTIVITES	SALAIRE PRIMES ALLOCATIONS			
Sous-Total				
TOTAL				

16d) En plus de votre salaire en espèces, recevez-vous des avantages en nature (ex. produits)?

[ ] Oui [ ] Non

Sous quelle forme recevez-vous ces avantages en nature?

_____

_____

6e) Comment êtes-vous rémunéré?

[ ] directement à vous-même

[ ] par chéque

[ ] en espèces

[ ] par virement

[ ] Salaire envoyé à un membre de votre famille

[ ] Salaire payé à l'intermédiaire qui vous emploie

[ ] Autres (précisez) _____

_____

17. Est-ce que vos employeurs vous ont accordé des crédits?

[ ] Oui [ ] Non

Si oui, combien de fois depuis votre entrée à l'entreprise?

_____

Montant maximum de crédit par an: _____

A quel taux d'intérêt par an: _____ %

18. Etes-vous membre du syndicat de l'entreprise?

[ ] Oui [ ] Non

EDUCATION, QUALIFICATION, EXPERIENCE

19. Expérience de travail dans l'industrie horticole. Précisez votre ancienneté dans le poste actuel et dans d'autres emplois similaires (selon le cas en années ou mois) :

Désignation	Mois	Nombre d'années (permanent)	Nombre d'années (saisonniers)
.Le poste actuel			
.Conserveries végétales			
.Entrepôts frigorifiques des fruits et légumes			
.Stations de conditionnement			
- agrumes			
- primeurs			
- fleurs			
.Autres activités horticoles (précisez) :			

20. Dans le cas où vous avez réalisé un travail similaire dans une autre société, est-ce que cette expérience vous a aidé à obtenir votre poste actuel? [ ] Oui [ ] Non

21. Apprentissage sur le tas. Quel pourcentage de votre qualification actuelle a été acquis dans cette société?

[ ] 100 % [ ] Plus de 50 %

[ ] Moins de 50 % [ ] Nul

22. Stages de formation. Avez-vous suivi des stages de formation technique? [ ] Oui [ ] Non

Si oui,

Stages Désignation	Lieu	Durée	Date (année)	Certificat obtenu

23. Quelle est la tâche la plus difficile à maîtriser dans votre travail?

_____

_____

24. Quelle est la tâche la plus facile à maîtriser dans votre travail? _____

_____

5. Besoins de formation. Souhaiteriez-vous suivre un stage de formation pour améliorer votre performance dans le travail actuel?

[ ] Oui [ ] Non

Si oui, quel genre de qualification désirez-vous recevoir?

_____

_____

SANTE ET SERVICES FAMILIAUX

26. Couverture sociale.

26a) Etes-vous couvert(e) par un système d'assurances?
[ ] Oui [ ] Non [ ] Je ne sais pas

26b) Si oui, quel type d'assurances avez-vous? Etes-vous satisfait(e) avec ces assurances? Quel est le montant de votre cotisation annuelle?

Désignation	Oui Non	Degré de satisfaction		Montant cotisation DH/an	
		Satisfaisante	Pas satisfaisante	Connaissez-vous le montant? Oui Non	Si oui, combien
.Assurance médicale					
.Assurance vie/ invalidité					
.Assurance accidents de travail					
.Retraite/ pension					

26c) Votre employeur prend-il en charge les assurances suivantes:

Assurance médicale [ ] Oui [ ] Non [ ] Je ne sais pas
Assurance vie/ incapacité [ ] Oui [ ] Non [ ] Je ne sais pas
Retraite/pension [ ] Oui [ ] Non [ ] Je ne sais pas
Assurance accident de travail [ ] Oui [ ] Non [ ] Je ne sais pas
Service des urgences en cas d'accident [ ] Oui [ ] Non [ ] Je ne sais pas

29. Accès aux services de santé. Fréquentez-vous les services de santé ci-dessous indiqués. Si non, pourquoi?

Désignation	Oui-Non	Pourquoi Non				
		Pas de temps	Ils sont éloignés de mon centre de travail	Trop chers	Je n'y crois pas	Autres (précisez)
.Planning familial						
.Service de vaccination des enfants						
.Hopital						
.Dispensaire						
.Clinique privé						
.Medecin privé						

30. Planning familial

30a) Vous ou votre époux(se) avez déjà consulté un service de planning familial? [ ] Oui [ ] Non

30b) Si oui, il s'agit d'un service
[ ] public [ ] privé

30c) Avez-vous (ou votre épouse) reçu ou comptez recevoir un suivi pré-natal professionnel? [ ] Oui [ ] Non
[ ] Je ne sais pas

30d) Auriez-vous recours à ces services s'ils étaient disponibles sur votre centre de travail?
[ ] Oui [ ] Non

31. Congés de maternité

31a) Votre employeur vous accorde-t-il un congé de maternité /paternité? [ ] Oui [ ] Non [ ] Je ne sais pas

31b) Si oui, combien de jours? _____ jours

31c) S'agit-il d'un congé payé?
[ ] Oui [ ] Non [ ] En partie

31d) Quels autres avantages vous offre votre employeur en cas de maternité?
[ ] en argent
[ ] en nature? Précisez _____
_____

32. Garde des enfants

32a) Avez-vous des enfants de moins de 10 ans?
[ ] Oui [ ] Non

32b) Si oui, vivent-ils avec vous? [ ] Oui [ ] Non

32c) S'ils résident avec vous, qui garde vos enfants pendant que vous travailliez? Où sont-ils gardés? _____
_____
_____

33. Absentéisme

33a) Si vous êtes un employé permanent, combien de jours, environ, vous êtes-vous absenté du travail en raison de : (1991-1992)
.Congés payés _____ jours
.Maladie _____ jours
.Maternité _____ jours
.Autres raisons _____ jours
(Précisez, ex. obligation familiale, stage, etc.) _____
_____

1b) Si vous êtes saisonnier, combien de jours environ vous n'avez pas travaillé, en 1991-1992, en raison de:

.Maladie _____ jours

.Raisons familiales ou personnelles _____ jours

.Recherche d'emploi _____ jours

. Arrêts de travail. Y-a-t-il eu des arrêts de travail dûs à une panne des machines (1991-1992)?

[ ] Oui [ ] Non

Si oui, combien de temps sur l'année (1991-1992)?

_____ heures, ou

_____ jours, ou

_____ mois

INCITATIONS ET CONTRAINTES A LA PRODUCTIVITE

35. Organisation du travail. Parmi les différents éléments cités ci-dessous, indiquez lesquels facilitent votre travail (confort des travailleurs) (classez) :

Désignation	Important	Peu important	Ne facilite pas	Ordre d'importance
.Cadence de la ligne de fabrication (rythme de travail)				
.L'espacement des chaines (tables) de travail				
.La position debout				
.La position assise				
.L'éclairage/aération suffisantes				
.Le nombre de pauses permises				
.Les directives du superviseur claires et répetées				
.La diminution des bruits				
.La sécurité des équipements utilisés (machines, instruments)				
.La qualité de la tenue du travail (gants, tablier, chaussures, bonnets, tabourets)				
.Autres (précisez):				

Enumérez les 3 éléments qui facilitent le plus votre travail par ordre degressif d'importance (marquez sur le tableau ci-

36. Conditions de travail. Parmi ces différentes conditions, lesquelles vous apportent le plus de satisfaction? (classez)

Désignation	Satis-faisant	Non satis-faisant	Ordre d'impor-tance
.Horaires de travail			
.Difficultés du travail			
.Production attendue/jour ou heure de travail			
.Régularité du travail (contrat ferme sur heure/mois de travail)			
.Sécurité de l'emploi			
.Montant de la paie			
.Régularité des salaires			
.Primes de rendement			
.Bonne entente avec les collègues			
.Savoir qui est le chef et quelles sont ses directives (connaissance hiérarchique)			
.Relations avec les superviseurs			

Enumérez les trois conditions de travail qui vous apportent le plus de satisfaction par ordre d'importance décroissant (marquez sur le tableau ci-dessus)

37. Motivations au travail. D'après-vous, quels facteurs constituent des incitations à améliorer votre performance dans le travail? (classez) :

Désignation	Ordre d'importance	Important	Peu important	Ne m'incite pas à mieux travailler
.Un salaire couvrant plus que les besoins de base				
.Avantages non-monétaires (ex. produits, pauses)				
.Assurances offertes par l'employeur - santé - incapacité - accident				
.Cotisation patronale à la retraite				
.Transport du personnel				
.Garderie des enfants sur le centre de travail				
.Congé de maternité				
.Services de planification familiale sur le lieu de travail				
.Services de santé pour les enfants				
.Services d'urgences médicales sur place				
.Restaurant d'entreprise				
.Sécurité préventive pour l'utilisation des machines				
.Ambiance de travail séparée pour hommes et femmes				
.Opportunité d'avancement de carrière et d'augmentation de salaire				
.Services de crédit et d'épargne offerts par l'entreprise				
.Travailler dans une ambiance amicale				
.Magasin d'entreprise (économat)				

Enumérez les trois principales incitations par ordre d'importance décroissant (marquez sur le tableau ci-dessus).

Productivité. Comment mesurez-vous votre performance dans le travail?

_____

_____

Magasin d'entreprise (économat). Y a-t-il un magasin d'entreprise dans votre centre de travail?

[ ] Oui [ ] Non

Si oui, est-il moins cher d'acheter les produits de base à l'économat? (sucre, thé, huile, café, savon).

[ ] Oui [ ] Non

Jusqu'à quelle limite vous fait-on des crédits à l'économat? _____

Qu'arrive-t-il si vous dépassez cette limite? _____

_____

IMPACT DE L'EMPLOI SUR L'INDIVIDU ET SA FAMILLE

40. Quelle est la part de votre salaire dans le revenu familial? _____ %

41. Estimez le pourcentage de votre salaire affecté à :
    - Loyer _____ %
    - Paiement de la traite de la maison (propriété) _____ %
    - Parents vivant à la maison _____ %
    - Alimentation _____ %
    - Autres dépenses (habillement, santé) _____ %
    - Acheter la terre agricole _____ %
    - Construire une maison _____ %
    - Acheter du bétail _____ %
    - Acheter des bijoux _____ %
    - Envoyer l'argent aux parents _____ %
    - Epargne _____ %
    - Autres achats (précisez) _____ %

    _____

42. Quels biens sont acquis en votre nom personnel? _____

    _____

    _____

43. Pouvez-vous subvenir aux besoins alimentaires de votre famille?

    [ ] Oui [ ] Non

44. Aimeriez-vous que vos fils fassent le même travail que vous? [ ] Oui [ ] Non

    Si non, quel genre de travail souhaiteriez-vous pour eux?

    _____

    _____

45. Aimeriez-vous que vos filles fassent le même travail que vous?

[ ] Oui [ ] Non

Si non, quel genre de travail souhaiteriez-vous pour elles?

_____

_____

46. Votre entourage (famille/voisins) accepte le travail que vous faites actuellement? [ ] Oui [ ] Non

47. Quelles sont vos raisons personnelles pour travailler?

[ ] avoir mon propre argent
[ ] aider ma famille
[ ] sortir de la maison
[ ] être indépendant(e)
[ ] j'aime travailler
[ ] le travail est nécessaire pour les individus
[ ] autres (précisez) _____

_____

48. Si vous êtes saisonnier(e), ce type de travail vous convient-il? [ ] Oui [ ] Non

49. Envisagez-vous de trouver un autre type de travail?

[ ] Oui [ ] Non

Si oui, quel genre de travail? _____

_____

50. Aimeriez-vous créer votre propre société d'industrie horticole? [ ] Oui [ ] Non

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ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE ORIENTEE VERS L'EXPORTATION

ETUDE DE CAS

- GUIDE D'ENQUETE -

CODE EMPLOYE :

SOCIETE : CODE :

REGION :

ACTIVITE ( ) CONSERVERIE ( ) STOCKAGE

( ) CONDITIONNEMENT

ENQUETEUR :

DATE D'ENQUETE :

1992-1993

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE HORTICOLE ORIENTEE VERS L'EXPORTATION

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-=-=-=-

INFORMATIONS GENERALES

1 - NOM : PRENOM :

2 - SEXE : ( ) FEMININ ( ) MASCULIN

3 - AGE : ---------- ANS

4 - LIEU DE NAISSANCE : PROVINCE : VILLE, VILLAGE :

5 - SITUATION MATRIMONIALE : ( ) CELIBATAIRE ; ( ) MARIE(E) ;

( ) DIVORCE (E) ; ( ) VEUF (VE)

5 a- SI MARIE (E), EST-CE QUE VOUS COHABITEZ AVEC L'EPOUX (SE)?
( ) OUI ( ) NON ( ) PARTIELLEMENT

* POURQUOI NON OU PARTIELLEMENT ?----------

5b - SI DIVORCE (E) OU VEUF (VE) : DEPUIS QUAND ?

5c - SI DIVORCE (E), VEUF (VE), CELIBATAIRE :

1)- EST CE QUE CETTE SITUATION VOUS A POUSSE (E) A CHERCHER UN EMPLOI ?

( ) OUI ; ( ) NON

* POURQUOI OUI ?

2)- TRAVAILLERIEZ-VOUS ICI SI VOUS ETIEZ MARIE (E) MAINTENANT ?

( ) OUI ; ( ) NON ( ) PEUT-ETRE

POURQUOI ? ----------

---

6 - POUR LES IMMIGRANTS : ( ) CONCERNE (E) . ( ) NON CONCERNE(E)

6a. ETES-VOUS VENU (E) DANS CETTE REGION A LA RECHERCHE D'UN EMPLOI ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

*. SI OUI, POUR TRAVAILLER DANS CETTE SOCIETE :

( ) OUI ; ( ) NON

6b. COMPTEZ-VOUS RESTER DANS CETTE REGION UNE FOIS ARRETE VOTRE EMPLOI AVEC CETTE SOCIETE :

( ) OUI ; ( ) NON

* POURQUOI ?----------

---

* SI NON, ENVISAGEZ-VOUS DE RETOURNER POUR LA CAMPAGNE PROCHAINE ?

( ) OUI ; ( ) NON

POURQUOI ? ----------

- SI OUI, POUR TRAVAILLER DANS LA MEME SOCIETE ?

( ) OUI ( ) NON

POURQUOI ? ----------

---

7 - COMPOSITION DU FOYER :

7.a LES MEMBRES DE VOTRE FAMILLE QUI COHABITENT ACTUELLEMENT AVEC VOUS?

A G E	NOMBRE	LIEN DE PARENTE
3 ANS ET MOINS		
DE 4 ANS A 6 ANS		
DE 7 ANS A 14 ANS		
DE 15 ANS A 60 ANS		
SUPERIEUR A 60 ANS		
TOTAL :		

7.b. QUELLES SONT LES OCCUPATIONS DES MEMBRES DE LA FAMILLE QUI COHABITENT AVEC VOUS ?

. EMPLOYE PERMANENT : NOMBRE ----------

. EMPLOYE SAISONNIER : NOMBRE : ----------

. TRAVAILLEUR INDEPENDANT : NOMBRE ----------

. SCOLARISE : NOMBRE : ----------

. SANS OCCUPATION : INFERIEUR A 15 ANS : NOMBRE F:--------M:-----

SUPERIEUR A 15 ANS : NOMBRE F:--------M:-----

7c. PARMI LES MEMBRES DE VOTRE FAMILLE, QUI SONT CEUX QUI TRAVAILLENT DANS

- LA MEME ENTREPRISE QUE VOUS ? NOMBRE ----------

- UNE AUTRE ENTREPRISE DANS LE SECTEUR HORTICOLE ? NOMBRE-------

- UN AUTRE SECTEUR ? : NOMBRE :----------

8 - ACTUELLEMENT ETES-VOUS LOGE(E) DANS VOTRE PROPRE FOYER ?

* ( ) OUI ; ( ) NON

* SI NON, ETES-VOUS LOGE (E) PAR L'ENTREPRISE ? ( ) OUI ( ) NON

* SI NON :

- QUEL EST VOTRE LIEN DE PARENTE AVEC LE CHEF DU FOYER OU VOUS LOGEZ - ----------

- POURQUOI LOGEZ-VOUS DANS CE LOGEMENT ACTUEL :

---

9 - SI VOUS AVEZ DES ENFANTS EN BAS AGE, VOUS POSENT-ILS UNE CONTRAINTE POUR TRAVAILLER EN DEHORS DE LA MAISON ?

* ( ) OUI ; ( ) NON ; ( ) NON CONCERNE (E)

* SI OUI POURQUOI ? QUELLES CONTRAINTES ?----------

---

* QUE FAITES-VOUS QUAND LES ENFANTS SONT MALADES ?

---

10 - POUR CEUX (CELLES) AYANT DES ENFANTS DE PLUS DE 10 ANS, QUAND VOS ENFANTS ETAIENT EN BAS AGE, AVEZ-VOUS TRAVAILLE ?

* ( ) OUI ; ( ) NON ( ) NON CONCERNE (E)

* POURQUOI ? ----------

---

* SI OUI, AVIEZ-VOUS TRAVAILLE :

( ) A TEMPS PARTIEL ?

( ) A PLEIN TEMPS ?

EDUCATION - QUALIFICATION - EMPLOI

11. LANGAGE :

- 11.a. DANS QUELLE LANGUE VOUS DONNE-T-ON LES DIRECTIVES DE TRAVAIL :

( ) ARABE ; ( ) BERBERE ; ( ) FRANCAIS ; ( ) ESPAGNOL

11.b. AIMERIEZ-VOUS QUE L'ON VOUS DONNE CES DIRECTIVES DANS UNE AUTRE LANGUE ? ( ) OUI ( ) NON - SI OUI, LAQUELLE ? ----------

12 - COMPRENEZ-VOUS FACILEMENT LES DIRECTIVES DE TRAVAIL DE VOS CHEFS ?

( ) OUI ; ( ) NON

* POURQUOI : NON ?----------

---

13 - QUEL EST VOTRE POSTE ACTUEL ?

14- POURQUOI VOUS ETES- VOUS ENGAGE (E) DANS VOTRE EMPLOI ACTUEL ?

---

15 - AIMEZ-VOUS CE TRAVAIL ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

15.a. QU'EST-CE QUE VOUS AIMEZ LE PLUS DANS CE TRAVAIL ?

15.b. QU'EST-CE QUI VOUS Y DEPLAIT LE PLUS ?

---

16. AVEZ-VOUS D'AUTRES OPPORTUNITES D'EMPLOI ?

( ) OUI ; ( ) NON

POURQUOI ? ----------

---

17 - POURQUOI LES FEMMES SONT RELATIVEMENT PLUS EMPLOYEES DANS CERTAINES TACHES (TRIAGE, CALIBRAGE, ETIQUETTAGE, ..) :

* ( ) LES FEMMES SONT PLUS PATIENTES ET OBEISSANTES QUE LES HOMMES.

* ( ) ELLES POSSEDENT UNE PLUS GRANDE DEXTERITE MANUELLE ET VISUELLE.

* ( ) ELLES ONT D'AVANTAGE BESOIN DE TRAVAILLER.

* ( ) CE TRAVAIL NE NECESSITE PAS UNE FORMATION PARTICULIERE.

* ( ) ELLES ONT UNE PLUS GRANDE RESISTANCE PHYSIQUE.

* ( ) ACCEPTENT LES SALAIRES OFFERTS POUR CE TRAVAIL.

* ( ) AUTRES RAISONS (A PRECISER)

17a - EST-CE QUE LES HOMMES PEUVENT FAIRE CE TRAVAIL ?

* ( ) OUI ; ( ) NON

* POURQUOI ?

17b - POUR FAIRE CE TRAVAIL, LES HOMMES AURONT-IL BESOIN D'ETRE MIEUX PAYES?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

18 - POUR LES ACTIVITES OU LES TRAVAILLEURS MASCULINS PREDOMINENT (DIRECTION, ADMINISTRATION, MANIPULATION LOURDE, SUPERVISION, TRANSPORT...) :

18a POUR QUELLES RAISONS LES HOMMES SONT PLUS SOLLICITES ?

18b LES FEMMES POURRAIENT-ELLES FAIRE CE TRAVAIL ?

( ) OUI ; ( ) NON

POURQUOI ? ----------

18c. SI OUI, DEVRAIENT-ELLES ETRE MIEUX PAYEES ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

19 - PEUT-ON MELANGER LES HOMMES ET LES FEMMES SUR LES MEMES CHAINES DE FABRICATION :

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

MOTIVATION DES EMPLOYES ET CONTRAINTES DE PRODUCTIVITE.

20 - APPRECIATION DE LA PERFORMANCE DANS LE TRAVAIL : COMMENT MESUREZ-VOUS VOTRE PERFORMANCE ?

---

21. QUEL EST VOTRE RENDEMENT MOYEN A L'HEURE ? ----------

22. QUEL EST VOTRE RENDEMENT MAXIMUM A L'HEURE ? ----------

DANS QUELLES CONDITIONS : ? ----------

23 - COMMENT VOTRE SUPERVISEUR MESURE- T-IL VOTRE PERFORMANCE ?

---

24 - COMMENT VOTRE GROUPE DE TRAVAIL MESURE- T-IL VOTRE PERFORMANCE ?

---

25 - QUEL NIVEAU DE PERFORMANCE(RENDEMENT/ HEURE) EXIGE-T-ON DE VOUS ?

---

26 - EST-IL DIFFICILE POUR VOUS D'ATTEINDRE LA PERFORMANCE (LE QUOTA DE PRODUCTIVITE) QU'ON EXIGE DE VOUS ?

- ( ) OUI ; ( ) NON ; ( ) NE S'APPLIQUE PAS.
- SI OUI, A QUEL MOMENT EST-IL PLUS DIFFICILE ?

---

27. SI VOUS TRAVAILLEZ DANS UNE CHAINE EST-IL DIFFICILE POUR VOUS DE SUIVRE LA CADENCE DE LA CHAINE ? ( ) OUI ( ) NON ( ) NON CONCERNE (E)

* POURQUOI OUI ? QUAND ?

---

28 - EXIGE- T-ON LA MEME PERFORMANCE (OU QUOTA DE TRAVAIL) DE TOUS LES EMPLOYES DE VOTRE GROUPE ?

. ( ) OUI ; ( ) NON ( ) NE S'APPLIQUE PAS

. SI NON, COMMENT EST-ELLE DETERMINEE LA PERFORMANCE (OU LE QUOTA DE TRAVAIL) EXIGE ?

---

29. Y-A-T-IL DES PRODUITS PLUS DIFFICILES A TRAITER QUE D'AUTRES (CALIBRAGE, TRIAGE, EMBALLAGE...) ? ( ) OUI ; ( ) NON ; ( ) SOCIETE TRAITE UN SEUL PRODUIT.

SI OUI, LESQUELS ? POURQUOI ? ----------

---

30 - LA SOCIETE VOUS OFFRE-T-ELLE DES ENCOURAGEMENTS POUR DEPASSER VOTRE PERFORMANCE DE PRODUCTION (VOTRE QUOTA DE TRAVAIL) ?

* ( ) OUI ; ( ) NON

* SI OUI CES ENCOURAGEMENTS SONT-ILS SUFFISANTS ?

. ( ) OUI ; ( ) NON

. POURQUOI NON ?----------

---

31 - QUEL POURCENTAGE D'EMPLOYES DE VOTRE GROUPE DE TRAVAIL A RECU DES ENCOURAGEMENTS (PRIMES, AUTRES...) OFFERTS PAR LA SOCIETE--------%

32 - Y-A-T-IL DES TRAVAILLEURS QUI TRAVAILLENT MIEUX QUE D'AUTRES ?

* ( ) OUI ; ( ) NON

* POURQUOI ?----------

---

33 - AVEZ-VOUS AUSSI ETE GRATIFIE (E) POUR VOTRE PERFORMANCE ?

* ( ) OUI ; ( ) NON

* POURQUOI NON ? ----------

---

* SI OUI, COMMENT ? ----------

---

34 - QUEL ENCOURAGEMENT AIMERIEZ-VOUS RECEVOIR POUR VOUS INCITER A AMELIORER VOTRE PERFORMANCE ?

---

35. PREFEREZ-VOUS UN ENCOURAGEMENT INDIVIDUEL OU COLLECTIF ? ----------

POURQUOI ? ----------

---

36. QUELLES SONT VOS PRINCIPALES CONTRAINTES DE PRODUCTIVITE ? ----------

---

---

37 - SOUHAITERIEZ-VOUS QUE VOTRE EMPLOYEUR VOUS OFFRE UNE FORMATION POUR AMELIORER VOTRE PERFORMANCE ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

* LAQUELLE ? ----------

---

38. COMBIEN DE TEMPS EST-IL NECESSAIRE POUR QU'UNE NOUVELLE RECRUE APPRENNE VOTRE METIER ? ----------

PAR QUELLE METHODE D'APPRENTISSAGE ? ----------

---

39 - VOS SUPERIEURS SONT-ILS COMPETENTS POUR MESURER VOTRE PERFORMANCE ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

40 - POUR LES EMPLOYES SAISONNIERS :

* APRES VOTRE ABSENCE POUR CAUSE DE MALADIE, RETROUVEZ-VOUS VOTRE EMPLOI DANS LA MEME SOCIETE

. ( ) OUI ; ( ) NON

. POURQUOI ? ----------

. ----------

. ----------

41 - ARRIVEZ-VOUS EN RETARD AU TRAVAIL (+ DE 15 mn) ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

* SI OUI, NOMBRE DE FOIS PAR MOIS ? ----------

42 - VOUS ARRIVE-T-IL DE QUITTER VOTRE TRAVAIL AVANT LA FIN DU TEMPS DE TRAVAIL ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

* SI OUI : NOMBRE DE FOIS PAR MOIS : ----------

43 - QUELLES SONT VOS POSSIBILITES D'AVANCEMENT DANS CETTE SOCIETE ?

* DE POSTE : ( ) OUI ; ( ) NON ; EXPLIQUEZ

---

* DE SALAIRE : ( ) OUI ; ( ) NON ; EXPLIQUEZ

---

* A QUEL POSTE AIMERIEZ-VOUS ETRE PROMU (E) ?----------

POURQUOI ? ----------

---

44 - COMMENT AVEZ-VOUS ATTEINT VOTRE SITUATION ACTUELLE ?

---

45 - TRANSPORT DU LIEU DE RESIDENCE AU LIEU DE TRAVAIL :

* QUELLE DISTANCE PARCOUREZ-VOUS QUOTIDIENNEMENT POUR ATTEINDRE VOTRE LIEU DE TRAVAIL ? ----------KM

* QUEL MOYEN DE LOCOMOTION UTILISEZ VOUS PRINCIPALEMENT ?

  ---

* QUEL EST LE COUT DE TRANSPORT JOURNALIER ? ----------DH/JOUR.

* COMBIEN DE TEMPS CELA VOUS PREND(ALLER)?-------HEURE----------MN

* CE TRANSPORT VOUS DERANGE-T-IL POUR LA BONNE REALISATION DE VOTRE TRAVAIL ?

  ( ) OUI ; ( ) NON

46 - RECEVEZ-VOUS DES ALLOCATIONS ? POUR :

* ( ) TRANSPORT ; ( ) LOGEMENT ; ( ) NOURRITURE

47- RESTAURANT D'ENTREPRISE :

* Y A-T-IL UNE CANTINE/RESTAURANT SUR VOTRE LIEU DE TRAVAIL ?

  . ( ) OUI ; ( ) NON

* SI OUI, EN BENEFICIEZ-VOUS ?

  + ( ) OUI ; ( ) NON

  + SI NON POURQUOI ? ----------

  ---

* SI NON, LE SOUHAITERIEZ-VOUS ?

  + ( ) OUI ; ( ) NON

  + POURQUOI ? ----------

48.Y-T-IL AUTRES FACILITES POUR DEJEUNER/DINER AU SEIN DE LA SOCIETE ?

( ) OUI ; ( ) NON

SI OUI LESQUELLES ? ----------

---

49 - PAUSES :

* PAUSE DEJEUNER : TEMPS ACCORDE --------H ----------MN

* AUTRES PAUSES : ( ) OUI ; ( ) NON

+ SI OUI, NOMBRE DE PAUSES ------- DUREE ---------- MN

* ETES-VOUS SATISFAIT (E) DES PAUSES ACCORDEES ?

+ ( ) OUI ; ( ) NON

* LE NOMBRE ET LA DUREE DES PAUSES SONT-ILS LES MEMES POUR L'ENSEMBLE DES EMPLOYES ?

+ ( ) OUI ; ( ) NON

+ SI NON POURQUOI ? ----------

---

* SONT-ELLES LES MEMES POUR LES HOMMES ET LES FEMMES ?

. ( ) OUI ; ( ) NON

. SI NON POURQUOI ? QUI BENEFICIE D'UNE PAUSE PLUS PROLONGEE ?

402

IMPACT DE L'EMPLOI SUR LA VIE DU TRAVAILLEUR ET DE SA FAMILLE.

50 - ETES-VOUS CHARGE (E) AUSSI, DE TOUS LES TRAVAUX DU MENAGE ?

( ) OUI ; ( ) NON ( ) PARFOIS

51 - VOS TRAVAUX DE MENAGE SONT ILS REDUITS A CAUSE DE CET EMPLOI ?

* ( ) OUI ; ( ) NON

* SI OUI - DE COMBIEN ? ---------- %

- QUI VOUS AIDE ? (LIEN, RELATION)

- QUI VOUS AIDE ALORS QU'IL N'EST PAS CENSE LE FAIRE ? (LIEN, RELATION...)

---

52 - QUELS SONT LES MEMBRES DE VOTRE MENAGE QUE VOUS SUPPORTEZ FINANCIEREMENT ?

LIEN DE PARENTE	NOMBRE	AGE (ANS)	TOTALEMENT DEPENDANT (NBRE)
ENFANTS			
FRERES			
SOEURS			
MERES			
COUSINS			
BEAUX PARENTS			
GRANDS PARENTS			
FEMME			
MARI			
-			
-			
-			
-			

53 - DEPENSEZ-VOUS TOUT VOTRE REVENU DANS VOTRE MENAGE ?
* ( ) OUI ; ( ) NON

54 - QUAND VOUS RECEVEZ VOTRE SALAIRE, EST-CE QUE VOUS LE GARDEZ VOUS-MEME ?

* ( ) OUI ; ( ) NON

* SI NON : A QUI VOUS LE DONNEZ (LIEN, RELATION) :

---

* COMBIEN VOUS EN GARDEZ ? ----------%

55 - DECIDEZ-VOUS ENTIEREMENT L'UTILISATION DE VOTRE SALAIRE ?

* ( ) OUI ; ( ) NON

* SI NON, QUI PREND CES DECISIONS ?

---

56 - VOTRE EMPLOI ET VOTRE FINANCEMENT DES DEPENSES MENAGERES, VOUS DONNENT T-ILS PLUS DE POUVOIR DANS LES PRISES DE DECISIONS FAMILIALES DANS LES AFFAIRES AUTRES QUE FINANCIERES ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

* ET DANS LES AFFAIRES FINANCIERES ? ( ) OUI ( ) NON

POURQUOI ? ----------

57- TRAVAILLEZ-VOUS POUR SUBVENIR A VOS BESOINS DE BASE ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

58. AVEZ-VOUS BESOIN DE TRAVAILLER DAVANTAGE POUR SUBVENIR A VOS BESOINS ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

59- POUVEZ-VOUS NE PAS TRAVAILLER OU TRAVAILLER MOINS SOUVENT ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

60 - EST-CE QUE CET EMPLOI VOUS DONNE UNE LIBERTE PERSONNELLE ET UN POUVOIR ?

* DANS VOTRE FAMILLE D'ORIGINE ( ) OUI ; ( ) NON

* DANS VOTRE MENAGE ( ) OUI ; ( ) NON

* PARMI VOS VOISINS ET VOTRE ENTOURAGE : ( ) OUI ; ( ) NON

* PARMI VOTRE MILIEU D'ORIGINE : ( ) OUI ; ( ) NON

61 - EST CE QUE VOTRE EMPLOI EST MAL VU PAR VOS PROCHES ET VOS VOISINS ?

* ( ) OUI ; ( ) NON

* <u>POUR LES FEMMES</u> :

+ QUE PENSE VOTRE MARI DE VOTRE EMPLOI ?

( ) FAVORABLE, ( ) DEFAVORABLE ; ( ) NEUTRE ( ) NON MARIEE

+ QUE PENSENT LES MEMBRES DE VOTRE FAMILLE DE VOTRE EMPLOI ?

( ) FAVORABLE ; ( ) DEFAVORABLE ; ( ) NEUTRE

+ QUE PENSENT LES MEMBRES DE VOTRE ENTOURAGE DE VOTRE EMPLOI ?

( ) FAVORABLE ; ( ) DEFAVORABLE ; ( ) NEUTRE

+ AVEZ-VOUS QUITTE VOS PROCHES (FAMILLE) POUR TROUVER CE TRAVAIL

( ) OUI ; ( ) NON

62 - EST-CE QUE LE MARIAGE EST UN OBSTACLE POUR LES FEMMES QUI VEULENT FAIRE CE TYPE DE TRAVAIL ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

63 - POUR LES FEMMES : CET EMPLOI PROVOQUE-T-IL DES DIVORCES ?

* ( ) OUI ; ( ) NON

* SI OUI :

( ) FACILEMENT ; ( ) RAREMENT

64. COMBIEN D'ENFANTS DESIREZ-VOUS AVOIR ?

* NOMBRE : ----------

* POURQUOI AUTANT ? ----------

---

* ( ) NON CONCERNEE (NE PEUT PAS AVOIR DES ENFANTS POUR AGE, MALADIES)

ETUDE SUR L'EMPLOI DANS L'INDUSTRIE
HORTICOLE ORIENTEE VERS L'EXPORTATION

ETUDE DE CAS

- GUIDE D'ENQUETE DES DIRECTEURS

SOCIETE : CODE :

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-=-=-

ETUDE DE CAS

-=-=-

GUIDE D'ENQUETE DES DIRECTEURS

1. PENSEZ-VOUS QUE POUR LA REUSSITE/COMPETITIVITE DE LA SOCIETE., LA PERFORMANCE DE LA MAIN D'OEUVRE EST :

   ( ) IMPORTANTE ; ( ) PEU IMPORTANTE ; ( ) PAS IMPORTANTE

   EXPLIQUEZ : ----------

   ---

2. ETES-VOUS SATISFAIT DE LA PERFORMANCE DE LA MAIN D'OEUVRE EMPLOYEE DANS CETTE SOCIETE ?

   ( ) OUI ; ( ) NON ; ( ) PARTIELLEMENT

   POURQUOI ? ----------

   ---

3. D'APRES VOUS, QUELS SONT LES FACTEURS ESSENTIELS POUR AMELIORER LA PERFORMANCE DES TRAVAILLEURS ?

   ---

4. QUELS ASPECTS/FACTEURS SOUHAITERIEZ-VOUS CHANGER DANS CETTE SOCIETE POUR AMELIORER LA PERFORMANCE/PRODUCTIVITE DE VOS TRAVAILLEURS ? (RECRUTEMENT DE JEUNES TRAVAILLEURS ; INSTRUITS ; ORGANISATION DE TRAVAIL ; FORMATION ET RECYCLAGE ETC...).

---

5. QU'EST-CE QU'UN OUVRIER (E) PERFORMANT (E)? ENUMEREZ LES CRITERES

---

6. LA SOCIETE ETABLIT-ELLE DES QUOTAS DE PRODUCTION/DE TRAVAIL POUR LA MAIN D'OEUVRE ?

* ( ) OUI ; ( ) NON

* SI OUI, CES QUOTAS SONT-ILS INDIVIDUELS OU COLLECTIFS ?

POURQUOI ? ----------

---

* CITEZ LES PRINCIPAUX QUOTAS PRATIQUES PAR VOTRE SOCIETE ?

---

7. CONTROLE DE PERFORMANCE :

7.a. Y-A-T-IL UN CONTROLE DE LA PERFORMANCE DES TRAVAILLEURS ?

* ( ) OUI ; ( ) NON

* POURQUOI ? ----------

7.b. LE CONTROLE EST-IL INDIVIDUEL OU COLLECTIF ? ET POURQUOI ?

7.c. COMMENT EFFECTUE-T-ON CE CONTROLE ? (EXPLIQUEZ)

7.d. CE CONTROLE EST-IL BASE SUR DES NORMES DE PRODUCTION PAR TRAVAILLEUR (NORMES DE RENDEMENT) ETABLIES ET CONNUES POUR L'ENSEMBLE DU SECTEUR (CONDITIONNEMENT/CONSERVERIE) ?

( ) OUI ; ( ) NON

EXPLIQUEZ : ----------

---

8. <u>P E R T E S</u> :

a. Y-A-T-IL DES PERTES DE MATIERE PREMIERE DUES A LA MAUVAISE MANIPULATION OU NEGLIGEANCE DES TRAVAILLEURS ?

* ( ) OUI ; ( ) NON

* SI OUI :

- % PERTE :

- CETTE PERTE DE MATIERE PREMIERE REPRESENTE-T-ELLE UN PROBLEME MAJEUR (COUTS IMPORTANTS) DANS LE FONCTIONNEMENT DE LA SOCIETE ?

( ) OUI ; ( ) NON

EXPLIQUEZ :----------

---

b. Y-A-T-IL DES PERTES EN CE QUI CONCERNE LES AUTRES APPROVISIONNEMENTS DE LA SOCIETE (CARTONS, ETIQUETTES ...) DUES A LA NEGLIGEANCE DES TRAVAILLEURS ?

( ) OUI ; ( ) NON

* SI OUI, CES PERTES SONT-ELLES PLUS IMPORTANTES EN COUT QUE CELLES DE MATIERES PREMIERES ? ( ) OUI ; ( ) NON

* POURQUOI ? ----------

---

9. LA SOCIETE OFFRE-T-ELLE DES ENCOURAGEMENTS POUR AMELIORER LA PERFORMANCE DES TRAVAILLEURS ?

( ) OUI ; ( ) NON

* SI OUI - SONT-ILS INDIVIDUELS OU COLLECTIFS ? POURQUOI ?

- QUEL GENRE D'ENCOURAGEMENT ?

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* SI NON : POURQUOI ? ----------

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10. <u>DIVISION DES TACHES</u> :

10.a. DANS QUELLES TACHES LES FEMMES SONT ELLES PLUS EMPLOYEES QUE LES HOMMES ? POURQUOI ?

<u>10.b.</u> POURQUOI LES HOMMES NE SONT-ILS PAS PLUS NOMBREUX QUE LES FEMMES DANS CES TACHES ? ----------

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10.c. Y-A-T-IL DES TACHES EXECUTEES UNIQUEMENT PAR LES FEMMES ?

* ( ) OUI ; ( ) NON

* LESQUELLES ? ET POURQUOI ?

10.d. PEUT-ON MELANGER LES HOMMES ET LES FEMMES SUR LA MEME CHAINE DE DE FABRICATION ?

( ) OUI ; ( ) NON

POURQUOI ? ----------

ANNEX H

FIRM CLASSIFICATION AND MAJOR PRODUCTS HANDLED IN POST-HARVEST ACTIVITIES

ETUDE SUR L'EMPLOI [illegible]
ORIENTEE VERS L'EXPORTATION

LISTE DES SOCIETES ENQUETEES

REGION	NOM DE LA SOCIETE	CODE ID	PRODUITS TRAITES	CLASSEMENT
AGADIR	COOP. AGRUMAR SOUSS	0803	AGRUMES	CONDITIONNEMENT AGRUMES
AGADIR	COOP. COPAG	0805	AGRUMES,POMME DE TERRE	CONDITIONNEMENT AGRUMES
AGADIR	COOP. M'BROUKA	0806	AGRUMES,TOMATES,POMME DE TERRE PIMENT,AUTRES(AUBERGINES)	CONDITIONNEMENT AGRUMES
AGADIR	PACK SOUSS	0808	AGRUMES,TOMATES,MELON,FRAISE POMME DE TERRE	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. TOUZAIKOU	0807	TOMATE	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. TAKAD	0810	TOMATE,POIVRON,COURGETTE ET PIMENT FORT.	CONDITIONNEMENT PRIMEURS
AGADIR	JOUBIR	0812	TOMATE,POMME DE TERRE,PIMENT FORT ET COURGETTE	CONDITIONNEMENT PRIMEURS
AGADIR	BOUCHOUKOU	0813	TOMATE,PIMENT FORT,POIVRON POMME DE TERRE,COURGETTE	CONDITIONNEMENT PRIMEURS
AGADIR	WAFA	0814	TOMATE,PIMENT FORT,POIVRON POMME DE TERRE,COURGETTE AUBERGINE	CONDITIONNEMENT PRIMEURS
AGADIR	NECTAR PRIM	0815	TOMATE	CONDITIONNEMENT PRIMEURS
AGADIR	BANANE	0816	TOMATE,COURGETTES,POIVRON, POMME DE TERRE	CONDITIONNEMENT PRIMEURS
AGADIR	ARBOR SUD	0817	FLEURS(ROSE,OEILLET,GLAIEUL) MELON,JUJUBE.	CONDITIONNEMENT FLEURS
AGADIR	AGRITRADE	0818	ROSE(FLEURS)	CONDITIONNEMENT FLEURS
AGADIR	COOP. AZROU	0804	TOMATES,COURGETTES,PIMENT FORT	CONDITIONNEMENT PRIMEURS
AGADIR	COOP. AL BARAKA	0807	AGRUMES	CONDITIONNEMENT AGRUMES
AGADIR	AMY	0811	TOMATE,POMME DE TERRE,POIVRON PIMENT FORT,MELON	CONDITIONNEMENT PRIMEURS
AGADIR	COOP.TOUBKAL	0817	TOMATE,POIVRON,PIMENT FORT, MELON,POMME DE TERRE,COURGETTE	CONDITIONNEMENT PRIMEURS
MEKNES	CONSERVES NORA	5501	PETITS POIS ,HARICOT VERT, ORANGE,PRUNEAUX,ASPERGE.	CONS. LEGUMES.
MEKNES	HUILERIES DE MEKNES	5507	OLIVES	HUILERIE.
MEKNES	LES CELLIERS DE MEKNES	5503	RAISIN	VIN
MEKNES	S.O.D.E.A.	5504	PRUNES,POMMES,POIRES,RAISIN ORANGES,KIWI,FRAISIERS.....	ENTREPOT FRIGO

REGION	NOM DE LA SOCIETE	ID	PRODUITS TRAITES	ETABLISSEMENT
MEKNES	SOCIETE COOP.VINICOLE D'AIT SOUALA	5505	RAISINS	CONSERVE VINS
CASABLANCA	PRODUITS SESTA	0201	OLIVES,CORNICHONS,	CONDIMENT
CASABLANCA	ETABLISSEMENT FRAI	0202	OLIVES	CONSERVE OLIVES
CASABLANCA	COOPERATIVE YAMAMA	0204	TOMATE,POMME DE TERRE	CONDITIONNEMENT PRIMEURS
CASABLANCA	SINCOMAR PARLIER ET FERRAUD	0205	RAISINS(VIN)	CONSERVE VINS
CASABLANCA	FRIGO TARIK	0206	POMMES,POIRES.	ENTREPOT FRIGO
CASABLANCA	FRIGO DELASSUS	0207	AGRUMES,POMME DE TERRE	ENTREPOIS,FRIGO
CASABLANCA	MAROC AGRUMES(PROMAGRUM)	0209	AGRUMES	CONDITIONNEMENT AGRUMES
CASABLANCA	UNION MAGHREBINE DE CONDITIONNEMENT (U.M.C)	0210	AGRUMES	CONDITIONNEMENT AGRUMES
CASABLANCA	BEROI	0212	TOMATES,POMMES DE TERRE. COURGETTES,CAROTTES	CONDITIONNEMENT PRIMEURS
CASABLANCA	CLEMENTINE	0214	FLEURS,(ROSE)(OEILLETS),AGRUME	CONDITIONNEMENT FLEURS
CASABLANCA	VINAIGRERIE CHERIFIENNE REUNIE (V.C.R)	0203	CORNICHON,HARICOT VERT, MAYONNAISE,VINAIGRE	EPICE/CONDIMENT
CASABLANCA	CONSERVERIE VEGETALE MAROCAINE (COVEM)	0208	TOMATE,HARICOT VERT,ABRICOT COND.AGRUMES	CONSERVE LEGUMES
CASABLANCA	SAHA	0211	TOMATE,POMME DE TERRE,PIMENT, AUBERGINES,FIGUES DE BARBARIE	CONDITIONNEMENT PRIMEURS
FES	SOFIAG	5601	OLIVES,CAPRES(AVANT LEGUMES)	CONSERVE OLIVES
FES	BEN MAKHLOUF ABBAS	5602	OLIVES	HUILERIE
FES	SIOF	5603	OLIVES,CAPRES,GRAINES OLEAGINEUSES	HUILERIE
FES	SOMIO	5604	OLIVES(HUILE DE GRIGNON)	HUILERIE
FES	SICOPA	5605	OLIVES,CAPRES,PIMENT,CORNICHON OIGNON SAUVAGE,ABRICOT	CONSERVE D'OLIVES
FES	MAROC CAPRES	5606	OLIVES,CAPRES	CONSERVE D'OLIVES
MARRAKECH	IOP AGRO	0401	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	RIM (ROYAL INDUSTRIE MAROCAINE)	0402	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	ZEMOURI CONSERVERIE DE MARRAKECH	0404	OLIVES,CAPRES,ABRICOTS	CONSERVE D'OLIVES
MARRAKECH	GIS EL MANSOURI	0405	OLIVES,ABRICOTS,LUPIN,CEREALES LEGUMINEUSES	CONSERVES FRUITS
MARRAKECH	HUILERIE ZEMRANI MERCILIERS	0405	OLIVES	HUILERIE
MARRAKECH	PAL MAROC S.A	0406	OLIVES,ORANGE,ABRICOTS	CONSERVE FRUITS

SUITE

REGION	NOM DE LA SOCIETE	CODE ID	PRODUITS TRAITES	CLASSEMENT
MARRAKECH	SOMIA	0407	OLIVES,CORNICHON,CAPRES	CONSERVE D'OLIVES
MARRAKECH	SOCIETE OLEICOLE IDRISSI	0408	OLIVES	HUILERIE
MARRAKECH	ETS TALBI	0409	OLIVES,CARROUBE	HUILERIE
MARRAKECH	HOP FOOD MOROCCO	0410	OLIVES,ABRICOTS,CORNICHON	CONSERVE FRUITS
MARRAKECH	SOCOSEMA.COOP.AGRICOLE D'ORANGE DE MARRAKECH	0411	AGRUMES,MELON,MARICOTVERT	CONDI.AGRUMES
MARRAKECH	PLANT ATLAS	0412	ROSE	CONDI.FLEURS
MARRAKECH	NOVA FLOR	0413	ROSE	CONDI.FLEURS
BERKANE	PUMURSA MAROC	0601	HIORA	CONSERVES EPICES
BERKANE	COOP. AGRICOLE NASR BOUSHNIBA	0602	AGRUMES	CONDITIONNEMENT AGRUMES
BERKANE	STATION MADAGH DU CONB.	0603	AGRUMES	CONDITIONNEMENT AGRUMES
BERKANE	SOCOBER	0604	AGRUMES	CONDITIONNEMENT AGRUMES
LOUKKOS	COMPAGNIE INDUSTRIELLE DE LOUKOS	0701	TOMATES, HIORA	CONSERVES DE LEGUMES