

# ग्रामीण विकास बजार आरोजना Market Access for Rural Development

(MARD/ Technical Assistant Team)

# PROJECT COMPLETION REPORT Technology Transfer

MARD/Lumbini-Gandaki Technical Report No. 103

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### **Technology Transfer**

#### 1. Introduction

MARD has concentrated its activities to increase volume of HVC production and its sale in market. It has initiated commercialization of improved and hybrid varieties of vegetable crops in six project districts. It has given some priorities to selected fruit crops such as citrus in Kaski, banana in Rupandehi and Kapilvastu and papaya also. The project has also popularized pointed gourd production in Rupandehi district.

MARD has formed 160 farmers group of 2709 producers in 123 sites of 24 VDCs in project districts (Table 1).

Table 1. Status of Vegetable Production Group

Name of District Description	Kaski	Syangja	Palpa	Rupan -debi	Nawal-	Kapil-	Total
No of VDC	4	4	4	<del></del>			
Groups		•	<u></u>	4	4	4	16
- Number	29	23	23	29	26	22	1/0
- No. of members	541	393					162
- No. of male	323						2752
- No of female						400	1900
			123	77	267	87	852
Group fund – Amount (NRs)	201,363	1,732,960*	398,734	177,265	277,182	216,894	3,004,398
	No of VDC Groups - Number - No. of members - No. of male - No. of female Group fund –	DescriptionNo of VDC4Groups Number29- No. of members541- No. of male323- No. of female218Group fund -201,363	Description         Syntage           No of VDC         4         4           Groups         - Number         29         23           - No. of members         541         393           - No. of male         323         313           - No. of female         218         80           Group fund -         201,363         1,732,960*	Description         Symigh         Taipa           No of VDC         4         4         4           Groups         - Number         29         23         23           - No. of members         541         393         364           - No. of male         323         313         241           - No. of female         218         80         123           Group fund -         201,363         1,732,960*         398,734	Description         Symmetry         Rupant chein           No of VDC         4         4         4         4         4           Groups         - Number         29         23         23         29           - No. of members         541         393         364         461           - No. of male         323         313         241         384           - No. of female         218         80         123         77           Group fund -         201,363         1,732,960*         398,734         177,265	Description         Syntage         Taipa         Rupan -dehi         Nawai-parasi           No of VDC         4         4         4         4         4         4         4           Groups         - Number         29         23         23         29         26           - No. of members         541         393         364         461         506           - No. of male         323         313         241         384         239           - No. of female         218         80         123         77         267           Group fund -         201,363         1,732,960*         398,734         177,265         277,182	Description         Syntage         Taipa         Rupan Jehi         Nawal-parasi         Kapil-vastu           No of VDC         4

<sup>\*</sup> One group of Triyasi, esatblished in 2053, has more than 1,20,000

There are more than 994 farmers (in MARD assisted farmer groups) who earned more than 50 thousand rupees up to the end of December 2001 (Table 2).

Table 2. Number of Farmers Who Earned more than Rs. 50,000 (up-to December, 2001)

S.N.	Name of Districts	No. of farmers- in Rs. '000							
		Rs. 5 to 25	Rs. 25 to 50	Rs. 50 to 100	Above 100	Total			
<u>l.</u>	Kaski	325	120	68	25	528			
2	Syangja	89	37	18	23	<del></del>			
3.	Nawalparasi	66	19	10		146			
4.	Kapilvastu	<del></del>		11	3	99			
		52	36	97	36	221			
5.	Palpa	Above Rs	. 50, 000			994			

Vegetable producer group has started group saving since July, 2000. It has been reported that the saving amount is about Rs. 3,004,398 up to the end of December, 2001. The group fund is being utilized to purchase vegetable seed, sprayers and other agri-inputs. Some group has utilized to install tradle and water pumps. Most of the group has provided loans out of group fund.

### 2. Project Components

- Market development
- Increased high value agriculture production
- Improved nutrition
- Bottom-up planning and policy reform

#### 3. Problems

# 3.1 Lack of technical know-how on vegetable cultivation among the farmers of MARD project areas especially on:

- high value vegetable crops
- importance of commercial vegetable cultivation
- technical know-how on off-season, early or late season vegetable production
- little knowledge about the use of improve or hybrid varieties of vegetables
- limited knowledge about season of growing
- lack of information about diseases and pests responsible for crop production and their control
- limited knowledge about health hazard insecticide and fungicides
- lack of knowledge about the use of balance nutrients to maintain the soil fertility, overdose use of nutrients, etc.
- lack of knowledge about the importance of pH maintenance by lime application
- no knowledge about useful and harmful insects for plant protection purposes
- knowledge on IPM (Integrated Pest Management) is almost nil
- no knowledge about different micro-nutrients causing decline of production; specially zinc, boron, iron, manganese, molybdenum, etc.
- limited use of compost responsible for poor yield.
- limited knowledge about nursery technique for seedling production

# 3.2 Limited numbers of Agri-input centers in production sites

- lack of improve and hybrid seeds, appropriate variety
- lack of seeds on time
- lack of quality seed; assured supply of seeds
- limited quantity as per demand
- no appropriate plant protection chemicals available
- most of the chemicals are costly
- sprayers and dusters are costly
- IPM tools are not available

# 3.3 Lack of irrigation limits production of vegetables specially during winter and summer

- farmers have to depend upon rain water
- limited knowledge about water management, sometimes over-irrigation cause setback of crop growth; no timely irrigation
- irrigation materials such as pipe, sprinkles not available easily and costly

#### Lack of knowledge about vegetable marketing 3.4

- no knowledge about market-led production, i.e. no demand-led production, vegetable type
- limited volume of production for market
- no information about seasonal demand
- no knowledge about distant market
- no information about price
- limited knowledge about post-harvest handling such as grading, packing, storing, transportation
- lack of group or cooperative marketing

#### 3.5 Lack of financial support at village level

- lack of money to buy agri-inputs
- lack of knowledge about saving and credit i.e. group fund

#### 3.6 Lack of marketing centers

- lack of collection centers
- lack of market for vegetable
- no storage facilities for perishable vegetables.

#### 4. Strategy

The strategy of TA Team is group approach to deliver the technical services as has been directed by Ministry of Agriculture.

#### 4.1 **Production**

- Increase area for commercial production
- Promote off-season and/or early late crop
- Promote improved or hybrid varieties
- Promote market led production.
- Encourage crop diversification

#### 4.2 **Group Formation**

- Formation of producer group
- Technology transfer, OFD, OST, FFD etc. through groups
- Promote saving and credit
- Encourage participation of women
- Encourage crop production to marketing
- Encourage bottom up planning at grass root level

#### Input Supply by Establishing Agri. Input Center 4.3

- Establish private agri-input supply centers in production area.
- Provide technical know how to the entrepreneurs

### 4.4 On Site Training (OST)

- Provide technical know to the group members in site itself on different crops as and when necessary.
- Provide training on specialized subjects.

### 4.5 Farmers Field Day (FFD)

Organize farmers field day in farmers field for specific crop season.

### 4.6 On Farm Demonstration (OFD)

- Promote improve/hybrid varieties to increase productivity for commercial production
- To find out off-season varieties and suitable time for vegetable production

### 4.7 Group Marketing

- Encourage formation of marketing group
- Establish collection centers
- Facilitate fresh vegetable marketing

# 5. High Value Vegetable Crops

# 5.1 Importance of using Improve and hybrid varieties for Demonstration

There are many improve and hybrid varieties available in the market of Nepal. The improved seeds are produced within country and there are some being imported from India and other countries. Most of the hybrid ones are from India, Japan, Korean and other countries Cauliflower Snowking and cabbage Greenstone are the hybrid ones being used by farmers for commercial production in most parts of Nepal. New hybrid lines of commercial crops have many good characters, which are given below:

- High yielding characters Tomato Ramya, Manisha, Abhinash
- Increase size and weight Tomato Ramya
- Uniform in germination Most of the seeds
- Uniform size Cabbage Greenstones
- Uniform in maturity Most of the variety
- Wide adaptability for off-season production
- Short duration varieties Shagun Okra
- Uniform marketable size Tomato Ramya, Cucumber Maheco
- Good quality for storage and transportation Ramya and Manisha tomato
- Early or shot duration type Shagun Okra
- Tolerance to high rainfall Tomato CL,
- Tolerance to disease Tomato Gresco, BL

# 5.2 Off-season / Early / Late Production

MARD Project has prioritized off-season, early or late production in the project areas. Production of crops at times other than during normal season is known as off-season crop

which actually changes availability in market. Farmers get high market price in compare to seasonal crop. Advantages of off-season, early or late vegetable production are given below:

- Higher price in the market and hence high net return per unit area
  - tomato of Bharatpokhari of Kaski and Triyasi of Syangja has high market value when produced during July to October.
  - early cauliflower of Dayanagar, Sundi and Gundi of Rupandehi and Patkhawa of Kapilvastu fetches high return when produced before November.
  - early harvesting of cucumber i.e. March has high market price.
  - radish 40 days early in Madanpokhara of Palpa is marketed at the rate of Rs. 10 to 12 per kg in Butwal market.
  - capsicum, california wonder when produced during October/November has very high market price; it is true for chilli also.
  - cabbage greenstone produced during October/November fetches high price.
- No problem of marketing, because of limited availability in market.
- Possibility of exporting to long distant market.
- Availability of fresh vegetables during off-season makes long period of availability for consumers.
- Vegetable growing season can be extended.
- Helps crop diversification.

Suitable off-season varieties of high value vegetables have been identified from the onfarm demonstration studies and are being preferred to commercialization by the farmers themselves. According to sale values, lean and peak season of some high value crops are presented in Table 3 given below. Based on the performances, preferred varieties, their suitable planting/harvesting time and production potentials are given in Annex I and II.

Table 3. Some Vegetables with Their High (Peak) and Low (Lean) Sale Values, 1999/2000

S.N	Crops	Market	Peak Season	Lean Season
1.	Tomato	Butwal	Aswin-Kartik and Ashad	Magh-Baisakh
		Pokhara	Aswin-Kartik and Ashad	Magh-Baisakh
		Narayangarh	Aswin-Kartik and Ashad	Magh-Jestha
2.	Cabbage	Butwal	Shrawan-Kartik	Chaitra-Jestha
		Pokhara	Shrawan-Kartik	Chaitra-Jestha  Chaitra-Jestha
		Narayangarh	Shrawan-Kartik	Falgun-Baisakh
3.	Cauliflower	Butwal	Asadh-Kartik-Magh	Poush-Chaitra
		Pokhara	Shrawan-Kartik-Magh	Magh-Chaitra
		Narayangarh	Asadh-Kartik-Magh	Magh-Chaitra
4.	Radish	Butwal	Asadh-Aswin	Falgun-Baishakh
		Pokhara	Asadh-Kartik, Baisakh-Asadh	Magh-Chaitra
		Narayangarh	Asadh-Aswin	Magh-Falgun
5.	French bean	Butwal	Aswin-Baisakh	Shrawan
		Pokhara	Aswin, Falgun-Baisakh	Kartik
		Narayangarh	Shrawan-Bhadra, Magh-Baisakh	Aswin-Kartik

### 5.3 Income from Vegetable

Vegetable is one of the crop which gives high net return per unit area if grown during off-season. Improved technology with improve/hybrid seeds lead to high productivity. It has been realized by the farmers in project area that use of hybrid tomato increases the production per unit area which gives them more return by selling even at lower price in lean season. Mid-hill farmers of Kaski and Syangja when produce tomato during July to October get high price in market. Net return of tomato hybrid per ropani are presented below:

Harvesting period	Net return per ropani
August-October November-February April-June	Rs. 20,500 Rs. 20,000
Aprii-Julie	Rs. 16,000

Income of farmers have been found to increase by growing vegetables in MARD areas. There are farmers who earn more than Rs. 50,000 per year (table 2).

### 5.4 Commercial Varieties

Vegetable varieties used for commercial production in project areas are limited in number. Characteristics of some of the improved and hybrid varieties grown in farmers field are discussed here.

#### 5.4.1 Tomato

Tomato is one of the most popular fruit vegetable in Nepal and ranks first in the project pockets too. The altitude variation of the country favors growing tomato in different seasons. It has high value during July to October in most part of the country. The altitude ranges from 500 to 1000 meter also in Bharatpokhari of Kaski and Triyasi of Syangja. Most of the improved varieties of tomato are harvested during rainy season i.e. June to September in Bharatpokhari of Kaski and August to October in Triyasi of Syangja districts.

The crop is grown in raised beds to avoid water logging during rainy season even terraced lands. High dose of compost or cow dung manure (15-20 mt/ha) is applied in the soil. DAP/ Complexal and Murate of Potash (225:225:250 NPK/ha) are mixed with compost and applied in soil. Top dressing with 150 kg DAP, 200 kg urea per ha boosts up productivity of this crop. The suitable time of top dressing is 20-25 days and 40-45 days after transplanting.

Various improved and hybrid varieties have been demonstrated (OFD) in the project pockets are given below:

CL1131 (OP) - Indeterminate plant type with vigorous branching; heat resistance and slightly tolerant to bacterial wilt and suitable for rainy season: fruits ready for first harvest in 65-75 days after transplanting; fruit shaped to flatish round firm thick skinned, initially greenish white and becoming yellowish red with slight green shoulder when ripe; good for long distance transportation: yield 15-20 mt per hectare; grown commercially in Kaski and Syangia.

BL410 (OP) - Indeterminate climbing type; heat resistance and field tolerant to bacterial wilt and suitable for rainy season; fruits ready for first harvest in 65-75 days after transplanting;

fruit weight 60 gm; round, firm, thick skinned, initially greenish and becoming yellowish red when ripe; good for long distance transportation; yield 35 mt per hectare; newly introduced varieties in Kaski.

Gresco OP - Indeterminate type; fruits ready for first harvest in 80-85 days after transplanting; fruit round, medium size; resistance to wilt; yield 20 mt per hectare; grown in Kaski, Palpa

Abhinash (F1) - Medium type plant; fruits ready for first harvest in 50-55 days after transplanting; fruit round, medium size with thick pulp up to 100 gm and red when ripe; good for long distance transportation; yield up to 120 mt per hectare in OFD of 1998/99 in Kapilvastu.

Apurwa (F1) - Determinate type, Tall 100-110 cm height; fruits ready for first harvest in 50-55 days after transplanting; fruit flattish round with thick pulp up to 120 gm and red when ripe; good for long distance transportation; resistance to blight; yields up to 115 mt per ha; in Rupandehi.

Ramya (F1) - Early indeterminate variety; fruits ready for first harvest in 60-65 days after transplanting; suitable for early winter season; fruit round and hardy up to 120 gm becoming red when ripe; uniform ripening; high yield up to 90 mt per hectare under OFD; very popular in Rupandehi and Kapilvastu.

Manisha (F1) - Indeterminate variety; fruits ready for first harvest in 60-65 days after transplanting; fruit round and red when ripe; thick pulp and good for long distance transportation; uniform ripening; high yielding average 70 mt per hectare under OFD and suitable for midhill area; commercially grown in Syangja and Palpa.

Naveen (F1) - Indeterminate variety; fruits ready for first harvest in 60-65 days after transplanting; fruit round medium size and hardy up to 100 gm; red when ripe; resistance to Fusarium and Varticellium wilts; yield up to 90 mt per hectare in OFD.

SCI (F1) - Indeterminate type plant 70-80 cm height; fruits ready for first harvest in 60-65 days after transplanting; fruit round medium size up to 75 gm; red when ripe; slightly resistance to blight; thick pulp and good for long distance transportation; yield up to 110 mt per hectare in OFD; grows well in Terai climate in winter.

Rakshita (F1) - Indeterminate type, fruits ready for first harvest in 60-65 days after transplanting; fruit flattish round up to 100 gm becoming red when ripe; resistance to virus and bacterial wilt; thick pulp and good for long distance transportation; yield up to 110 mt per hectare; being popular in Palpa.

Rupali (F1) - Indeterminate type plant about 60 cm height with profuse branching; fruits ready for first harvest in 80-85 days after transplanting; fruit round, medium size up to 100 gm; red when ripe; resistance to Fusarium and Verticellium wilts; yield up to 90 mt per hectare.

CL Pointed (OP) - Introduced from Panchkhal, Kavre, small size at apex pointed, acidic taste; good for rainy crops as an off-season in hills; fetches high price in September/October.

#### 5.4.2 Cauliflower

Cauliflower is a very popular vegetable in winter. With the availability of varieties and technology its cultivation is also being as an early crop in Terai districts..

High dose of nitrogen and potash is required for this crop. During the planting time, 20 kg DAP, 10 kg Murate of Potash, 3 kg of Urea and 1 kg of Forate or Thimet per ropani mixed with decomposed compost and applied in the soil. After one month of transplanting, 5 kg Urea per ropani is applied as side dressing.

# Improved (OP) and Hybrid (F1) Varieties Tested under OFD are discussed below:

Snow-Ball-16 (OP) - Late maturing variety; harvest in 80-90 days after transplanting; leaves dark green; curds snow white and compact, weighing up to 3 kg; good yield up to 50 mt per hectare under OFD; grown as a winters crop in Palpa and Syangja.

Pusa Katiki (OP) - Early maturing variety in 60 days after transplantation; curds clear white and compact with cone like concentric appearance and weighing up to 1 kg; yield up to 24 mt. per hectare, early crop under Rupandehi and Kapilvastu.

Snow Crown (F1) - Early maturing variety in 70-80 days of transplanting; curd medium size compact white weighing up to two kg; good yield up to 30 mt per hectare.

Pusa Deepali (F1) - Early maturing variety in 60 days of transplanting; erect leaves; curd white and compact and weighing 400-500 gm; good yield up to 20 mt. per hectare, early in Terai districts.

Kibo Giant (F1) - Late maturing variety in 130-160 days after transplanting; plants are short stemmed, semi-erect and vigorous; leaves are large, wavy with minutely serrated leaf margins with small spiny projections along the margins and leaf surface waxy green; curds are white to creamy white, compact with cone like concentric appearance at the center of curd and self blenched; yielding 25-30 mt per hectare; grown as a late winter crop in Syangja.

Indam Early (OP) - Early maturing variety in 60 days after transplanting; leaves bent towards curd; curds snow white and compact weighing up to 400 gm; good yielding up to 20 mt. per hectare; grown as an early crop in Rupandehi and Kapilvastu.

Snow Mystique - New F1 lines being popular in Rupandehi, medium size.

### 5.4.3 Cabbage

Cabbage is commonly grown in winter, availability of improved and hybrid varieties and technology, farmers grow cabbage early and late in Terai.

High dose of nitrogen and potash is required for its cultivation. During the planting time, 20 kg DAP, 10 kg Murate of Potach, 2 kg Furadan or 1 kg Phorate is mixed with 400-500 kg of well decomposed cow dung manure applied in the soil. Seedlings are transplanted 20-45 cm distance in the row. After one month of transplanting, 5 kg Urea and cow dung manure per ropani is applied as side dressing.

Green Coronet (F1) - Medium maturing variety in 60-80 days after transplanting; small stem with few green leaves; resistance to black rot; head solid, some what flat yielding up to 80 mt. per hectare and grows well in summer in hills and terai districts.

Green Stone (F1) - It is similar to Green Coronet, medium maturing variety in 60-80 days after transplanting; few cup shaped shiny green leaves with small stem; head solid, large and some what flat; good yielding up to 80 mt. per hectare and performs well in summer season.

Zenith (F1) - Early maturing variety in 60 days after transplanting; cup shape of lower leaves; planted in close spacing (35 x 30 cm); head solid and weighing up to 700 gm and yielding up to 70 mt per hectare, grown well in Terai and Kaski.

T-621 (F1) - Early maturing in 60 days after transplanting; head solid, yielding up to 80 mt per hectare; being popular in Rupandehi and Kaski.

#### 5.4.4 Potato

Potato is a high value cash crop having high productivity and high calorie per unit of land.

The crop required high dose of fertilizers. During the planting time, 200 kg DAP, 200 kg Murate of Potash, 100 kg Urea, 25 kg Zinc Sulphate and 20 kg Phorate/Thimet thoroughly mixed and applied in soil. Cow dung manure is used @ 30 mt per hectare. Top dressing is done, first after one month and another after 45-50 days of sowing.

*Kufri Jyoti* - Early variety, crop harvested in 110-120 days after sowing; tubers are big, white oval shaped; resistance to blight and wart but required early harvesting; yields 40 mt per hectare.

*Kufri Sinduri* - Late variety, crop ready to harvest in 140 days after sowing; tubers are medium size, round with deep eyes and light red in color; good storability, suitable for Terai region; yields 40 mt per hectare.

Cardinal - Early variety, becomes ready in 110 days after sowing; tubers are light red; oval shape, yields 40 mt per hectare;

Desiree - Early variety, becomes ready in 110 days after sowing and is suitable for hill and terai; tubers are light red and elongated shaped with good taste; resistance to blight to some extent; yields 30 mt per hectare.

MS 48 - Popular in Kaski (Pokhara valley), low dormancy, wart susceptible in high hill; yields up to 30 mt per hectare.

### 5.4.5 Other Vegetables

Improve and hybrid varieties of other vegetables grown in the project areas are given below:

Cucumber (Bhaktapur local) - Medium season variety, ready in 60-70 days after transplanting; fruit 20-25 cm long with 8-10 cm diameter and yields upto 30 mt per hectare.

Cucumber (Maheco Long) - Long green hybrid variety, with high number of female flowers, hence high yielding character; suitable for terai districts.

Squash (Grey Zucchini) - Early maturing; bearing more female flowers; fruit 20-30 cm long shiny green; resistance to downy mildew, anthracnose, yielding up to 45 mt per hectare. Bulam house F1 is also similar to this but yield less and is susceptible to downy mildew and anthracnose.

Bitter gourd (Coimbtore Long - white long) - Open pollinated variety with white green color; fruit large and long; high price most of the month, attractive price as an early season (March - May); 15-20 mt per hectare, requires staking of roof type.

Bitter gourd (Jhallary) - Open-pollinated variety having dark green color; fruit large and elongated type, Similar market value as Coimbtore long, 10 to 15 mt per hectare; also requires roof type staking.

Onion (Sun Rojo F1) - Bulbs mature in 130-140 days; bulb is big, tight, round and red in color; yields 100 mt per hectare in OFD.

Okra (Shagun F1) - Early maturing; fruits ready for first harvest in 42-45 days after germination; plant 180 cm height; fruits green 10-11 cm long and can be stored longer; resistance to yellow vein mosaic, hopper, aphid and borer; yields 25 mt per hectare.

Radish (Forty-days) - Short duration variety; harvested within 40 days even in Madanpokhara of Palpa condition; small size of 10-15 cm; grown as an rainy season crop in Palpa; winter crop in terai; fetches high price Rs. 10-15 per kg in Butwal market by farmers of Palpa.

Chilli (Tejeswini F1) - Late maturing, fruit ready for picking in 75 days after transplanting, plants dark green, 70 cm height, fruits pungent 9-11 cm pointing downward; yielding up to 20 mt per hectare.

Brinjal (Noorki - OP) - Long purple color variety; high yielding characters, suitable in mid hills for summer and rainy season, less seeds, fruit 10-15 cm long.

Brinjal (Pusa Purple Long (PPL) - OP) - Long purple color variety somewhat large size in comparison to Noorki; high yielding for summer and rainy season in mid hill of Palpa.

Brinjal (Saurav - F1) - Medium season, fruits ready for first harvest within 70 days after transplantation; less number of seeds; yield up to 60 mt per hectare in Terai districts.

Parwal (Pointed groud) - Parwal is one of the high value, each crops which is being imported mostly from India. It is one of the delicious vegetable crop having very high market price. It was found suitable climate to grow in Rupandehi and there are some farmers in Dayanagar growing Parwal. To expand the Parwal area, project introduced some varieties from Bardia to have demonstration since FY 2000/2001. More than 50 farmers are involved in Parwal production at present having one or more than one katha of land. Some farmers could sold Parwal this year itself.

Beans (Kentuky Wonder) - Popular leguminous vegetable having climbing nature, brown color seeds, good market for summer and late rainy season.

- Four Season: Popular beans, climber, black seed, high yield.
- SC-9: Bush bean, ready to harvest within 40 days, suitable for early crop.
- Rajma: Bush bean, short duration, also suitable for early season.

Papaya (Mathuri and Madhubala) - Papaya varieties have been introduced in Terai districts as well as in Palpa and Syangja, more number of male plants in some area created a problem. Farmers found problem to dispose even though good production in Nawalparasi district.

Banana (William Hybrid) - This variety of banana introduced for demonstration in Rupandehi and Kapilbastu districts; propagated through plant tissue culture technique from Kathmandu, plant-lets raised in nursery for about 3 months transplanted in field.

Citrus - Management demonstration on citrus has been conducted in citrus (mandarin) crops in Bharatpokhari of Kaski district. Practical training on Bordeux paste application, micronutrient spray as well as manuring and fertilizer application were part of demonstration. A visual effect has been found by farmers.

- 6. Activities Accomplished
- 6.1 On-site Training (OST)

### 6.1.1 Crop

Technical service was made available to the farmer group through training at village level on the production site itself. This helped the farmers to have full participation, less time consuming and cost-effective also. Practical training made more fruitful when the training was done in farmers' field itself. The training was provided on the basis of crops grown commercially. The project also provided training on different problems of crop. It has been realized that the nursery raising of seedlings is one of the main subject in most of the groups. Diseases and pests are some of the serious problem, hence plant protection training were given under OST activities.

# 6.1.2 Specialized Training

#### *IPM*

Training cum demonstration have been conducted on IPM of selected vegetable crops such as tomato and cucurbit in Palpa, Syangja, Kaski, Nawalparasi and Kapilvastu. This has also been done in mandarin orange in Kaski. A short term consultant was hired for this purpose\*. Results of IPM are discussed below:

IPM on Fruit Borer (<u>Helicoverpa armigera</u>) in Tomato - Bioneem spray has been found to minimize the damage of fruit borer of tomato in Panitanki group of Nawalparsi. Use of Heli lure trap was found by showing large number of male fruit borer attracted in the traps of Syangja and Palpa. This is helpful to find out the time of damage. It has been reported that  $2^{nd}$  and  $3^{rd}$  weeks of May have more population in the traps at Syangja and Palpa, while it is

<sup>\*</sup> Training manuals were distributed to the participating members on the IPM technique along with IPM tools.

in first week of May. Spray of 1 ml of 100LE-NPV per liter of water along with 5 drops of blue ink and sticker helped to minimize the larval damage of this insect specially in Syangja. Farmers of Palpa also appreciated the IPM technique for the tomato fruit borer. Syangja farmers themselves used the NPV.

IPM on Cucurbit Fruit Fly (<u>Bactrocera cucurbitae</u>) - Cucerbit fruit fly is responsible for rotting of fruits in cucumber, squash and other cucurbit crops during summer and rainy season. It has been found an increase in population in March to May in Kaski, Syangja, Palpa, Nawalparasi and Kapilvastu pocket areas. Fruit fly traps were used to attract the male flies with the help of Bactrocera cucurbitae lure. This helped to minimize the further breeding of the insect responsible for fruit rotting in the areas where demonstrations have been done. Farmers have started the use of IPM techniques in cucurbit crop in Syangja and Palpa.

IPM on Citrus fruit fly (<u>Bactrocera dorsalis</u>) - Fruit fly trap was used for the citrus fruit fly in Bharatpokhari of Kaski. B. dorsalise lure used in the trap was not found attractive to the male flies as has been reported, probably due to management. It has been found that most of the farmers did not add insecticide in the trap, which is responsible for this ineffectiveness. However, April last week was found more number of population of insects.

IPM on Diamond Back Moth (DBM) (<u>Blutelha xylostella</u>) - Delta trap was used for Diamond back moth of cole crops in Sundi of Rupandehi in the month of March, which was not found effective due to use in later part of crop insect. NPV on DBM is effective to minimize the insect population.

#### OST on Micronutrient

Deficiency of different micro-nutrients in vegetable crops is one of the main reason to decrease the yield or even make failure of the crop. It has been observed deficiency symptoms of zinc, boron, iron, manganese, molybdenum and other in cole crops and tomato. The symptoms are similar to some of the virus disease in tomato. Hence, awareness was created among farmers group by training cum demonstration on micro-nutrients. Use of zinc and boron in tomato helped to minimize the deficiency of symptoms. There are number of chemical products in the market which contains different micro-nutrients such as multiplex, high-power, dithane z-78, borax, zinc sulphate, chelamin, etc. The multiplex and high-power were used during demonstration. It was found effective.

#### OST on Effective Micro-organism (EM)

EM, a micro-organism product available in market decomposes compost materials within a short period of 30 days instead of 90 days or so in Nawalparasi and Kaski. The demonstration was done to create interest of farmers to fasten the decomposition of compost materials. The compost is one of input which is necessary for the proper growth of vegetable crops.

#### OST on Seed Production

Seed is one of the main input which is responsible to increase production. There are some vegetable crop seeds not available in plenty on time. The available seeds are also not good quality. Some crop seeds are not available in the market. To meet some of the seed

demands, a seed production has been organized in Madanpokhara of Palpa district. The variety of crop selected was self-pollinated which has less chance of cross pollination. Hence, tomato -Cl pointed, brinjal - Noorki and PPL, and tomato - Monprecos varieties were selected for training purposes. Training was given to the farmers' group on seed-production.

### 6.3 Farmers' Field Day (FFD)

Farmers' field day is one of the tools to diffuse the improved technology among the farmers. A field day site is selected for the FFD to be organized. Farmers of outside the group specially of surrounding areas generally participated in the FFD. Knowledge about the technique adapted in the FFD site is provided to the participating members.

# 6.4 On-farm Demonstration (OFD)

Seeds of OFD has been provided to all the members of group. Cost of seeds is reimbursed by them and deposited in their group fund. It has popularized the F1 hybrid varieties in MARD areas. The OFD results have been found variation from one sets to another and season of planting. Farmers' preference has been found as per production and quality specially tomato hybrid variety. There are many improved open pollinated varieties suitable for commercial production in project areas which have been commercialized in the following years. Tomato - Gresco, Cucumber - Bhaktapur Local, Radish - 40 days, and Brinjal - Noorki. The name of crops and their number of varieties used are presented in Annexes IV to X.

# 6.5 Technology Upgrading to Agri-input Centers

MARD has encouraged to establish agri-input centers in private sectors to supply seeds, plant protection chemicals and other inputs in production area. The object of the input center is to make available quality seeds on time for vegetable growers. It has been realized that seed is one of the main constraint in the promotion of vegetable in project areas. The project took initiation for the purpose of establishment of the agri. input centers. It has organized training to get license to the interested ones with the help of Plant Protection Division of Dept. of Agriculture. There are some suppliers which were established before the project. There are more than 50 agri-input at present.

It has been realized that agri-input supply centers may be the key centers which will provide technical inputs at grass level in the production areas. Hence, the project has given training to upgrade the technology of Agri-Input Suppliers. A manual on the subject was provided to all the concerned input centers who participated during training.

# 7. Impact of High-value Vegetable Production Program of MARD

# 1. Changes in Farming System and Crop Diversification

- From traditional cereal crop to vegetable ones,
- Traditional crops replaced by improved vegetable
- Introduction of new commercial vegetable crops like tomato, cucumber, chilli, parwal, etc.
- Changes in season of crop growing tomato in rainy season, radish in summer and rainy season instead traditional maize in rainy season.
- Growing winter vegetable cauliflower, cabbage tomato, etc instead of wheat.
- Off-season or early or late vegetable crop production.

- Production of high value cash crops like cucumber and bitter gourd as early as February, March; early winter capsicum, cauliflower, cabbage production in lower hills and terai.

# 2. Seedling Production of Vegetable

- Use of insecticide as a seed treatment
- Soil treatment for diseases
- Seedling treatment for disease
- Use of growth promoter
- Seedling production in plastic tunnel
- Seedling production in plastic bag

# 3. Improve Land Preparation

- Use of more compost or decomposed FYM for vegetable production.
- Use of required dose of NPK as basal dose
- Application of micro-nutrients as basal dose
- Application of insecticide and fungicides as basal dose
- Preparation of bed for easiness to irrigate
- Sowing of seeds or transplanting of seedlings on line for easiness of cultural operations.

### 4. Increase Area and Production

- An increase area of vegetable
- An increase of commercial vegetable
- An increase of off-season vegetable including early or late crop
- An increase of volume of production of vegetable
- Promotion of off-season crop, early or late
- Use of improved or hybrid varieties
- Promotion of market demand crop
- Promotion of new high value crops such as parwal, banana, papaya, chilli

# 5. Increase Productivity

- An increase of productivity by more than two times.

# 6. Use of Other Improve Technology

- Use of IPM
- Use of micro-nutrient
- Use of growth promoter

#### 7. Local Institution

- Capacity building of farmers and group members, farmers group
- Promote marketing group or cooperatives of vegetable producers to facilitate marketing.
- Saving and credit through local resource collection group fund

# 8. Agri-inputs Supply Centers

- Easy access to seeds, plant protection chemicals and other inputs
- Establishment of agri-input centers in production areas.
   Timely available of quality improved seeds

### 9. Increase Income

- An increase income by vegetable crops
- Capacity to buy cereals for consumption
- Less credit requirement

'High Value Crops in Terai (Nawalparasi, Rupandehi and Kapilvastu), 2001

SN	Vegetables	Variety	Planting (Month)	Harvesting (Month)	Yield Potentiai (Kg / Ropani)
1	Potato	Kuphri Jyoti.	Bhadra-Ashoj &	Margh	1500 - 2000
		Kufri Sindhuri.	Paush-Magn	Chaitra-Baisakh	1500 - 1800
		Desire		Charte Dansardi	1200 - 1600
2	Cauliflower	Indam Early	Bhadra-Asnoj	Kurtik-Margh	1000 -1500
		Pusa Depaii. Pusa Katki.	Bhadra-Ashoj	Kartik-Magn	1000 - 1200
		Snow Crown, Snow Ball-16	Paush-Magn	Chaitra-Baisakh	1000 - 1500
		Serrano		Cilaid a - Daisakii	1800 - 2000
3	Cabbage	Green Stone	Bhadra-Ashoi	Margh-Paush	2000 - 3000
		Green Coronet	Paush-Magn	Chaitra-Baisakh	3000 - 4500
		T-621		Charles-Daisakii	2000 - 3000
		Zenith			1500 - 2700
4	Tomato	Ramiya	Bhadra-Ashoj and	Kurtik-Margh	
		Manisha	Paush-Magn	and	3000 - 4500 3500 - 4200
		Rakshita	1 ddSt1-:vmg11	Faigun-Chaitra	l l
		Abinash		Laigni-Chaira	3400 - 5000
		Rashmi			4000 - 5000
		Naveen			3500 - 4000
		Rupali,			2000 - 3000 3000 - 4000
		Namdhari			
		Apurba			2500 -3500
		ACC-9			3300 - 4000
5	Capsicum	California Wonder	Paush-Maon	Chaitra-Baisakh	2300 - 2800
		- Carrottan voltage	Srawan-Bhadra	Ashoi-Kartik	1000 - 1500
6	Cailli	Tejeswini	Paush-Magh	Ashoj-Kartik	1 1000 1700
		Suryamukhi	Ashadh-Srawan		1000 - 1500
		Jwaia	.ASIAGII-SIAWAII	Ashoj-Kartik	500 - 600
		NS. Tapan			600 - 700
7	Brinjal	PPL	Magn-Falgun	D: III	1000 - 2000
•	Dingar	Nurki	Srawan-Bhadra	Baisakh-Jestha	1500 - 2000
		Saurav	Stawaii-Diladri	Ashoj-Kartik	1200 - 2000
		Pusha Kranti			1500 - 2500
8	Cucumber	Maheco Long	Devok VC		1700 - 2000
•	Cacamber	Poinset	Paush-Magn	Chaitra-Baisakh	1200 -17000
		Bhaktapur Local	Margh-Paush (Tunnel)	Chaitra-Baisakh	1000 - 2000
<u> 9</u>	Bittergourd	Coimptore Long	Jestha - Asadh	Bhadra-Ashoi	1500 - 2500
_	Ditte: gould	Jhallary	Pausn-Magn &	Chaitra-Baisakh	1000 - 1500
		Maneco Long	Jestha-Ashadh	Bhadra-Ashoj	1000 - 1500
		Jaunpuri			1000 - 1500
		Faisabadi			1500 - 1600
10	Consuis			<u> </u>	1200 - 1500
10	Squash	Grey Zucchini	Paush-:Vlagh	Cnaitra-Baisakh	1000 - 2500
11	i Duck been	Buian House		!	1500 - 2500
1 1	Bush bean	Bush Bean	Magn-Faigm	Chaitra-Baisakh	1000 - 1500
		Four Season			1000 - 1500
1.3	<u> </u>	S-9		<u> </u>	1000 - 1200
12	Long bean	Sariahi Long	Magh-Faigun	Chaitra-Baisakh	1000 - 2000
		Khumal Long	Bhacira		1000 - 2000
	. 5	Kasmiri Long			1000 - 1500
13	Pea	Arkei, Azad	Margh	Magn-Faigun	500 - 600
1-1	Radish	40-days	Bhadra-Asnoj &	Kartik-Margin	600 - 1000
	!	Tokinose	March-Mach	Magh-Baisakh	
15	Okra	Arka Anamika	Srawan-Bhadra	Asnoj-Kartik	600 - 1000
	!	Parwani Kranti. Sagun	Magn-Falgun	Chaitra-baisakh	700 - 1500
ió	Onion	Red Creole, Nasik Red	Margn-Pausn	Chaitra-Baisakh	1500 - 2000
		Sun Rojo			1800 - 2500
7	Watermeion	Sugar Baby	Magn	Chaitra-Baisakh	1500 - 2000
8	Bottlegourd	Local	Magh	Chaitra-Baisakh	1500 - 2000

# High Value Crops in Midhills (Syngja, Palpa and Kaski), 2001

3N	Vegetables	Variety	Planting	Harvesting	Yield Potentiai
	İ		(Month)	(Month)	(Kg / Ropani)
1	Potato	Cardinal, Kuphrijyoti, Desire, NSI		Margh-Paush	1000 - 2000
2	Cauliflower	Snow Bail-16, Snow Crown.	Bhadra-Ashoj	Kartik-Margh	1000 -1500
		Snow King, Serrano			
		Pusa Depali, Pusa Katki, Indam	Bhadra-Ashoj	Ashoj-Kartik	750 - 1000
		Early (early varieties)			
3	Cabbage	Green Stone, Green Coronet, KK	Bhadra-Ashoj	Kartik-Margh	1000 - 2000
		Cross, T-621			
4	Tomato	CL-1131, BL-410, CL pointed	Jestha-Ashadh &	Srawan-Bhadra	1000 - 2000
		Gresco	Srawan-Bhadra	Ashoj-Kartik	
		Ramiya, Naveen, Nutan, Rupali,	Bhadra-Ashoj &		2000 – 2500
		Abinash, Manisha, Rakshita	Magh-Falgun		1500 - 2000
5	Capsicum	California Wonder	Srawan-Bhadra	Kartik-Chaitra	1000 - 1500
			Paush-Magh		
6	Chilli	Suryamukhi, Jwala, Yatsuphu,	Srawan-Bhadra	Kartik-Magh	750 – 1000
		Kathmandu,	Paush-Magh	Baisakh	
		Tejeswini. Tapan.			1000 - 1500
7	Brinjai	Nurki, PPL PPC	Asadh-Srawan &	Asoj-Margh &	1000 – 1500
		Saurab	Paush-Magh	Chaitra-Baisakh	1500 - 2000
8	Cucumber	Bhaktapur Local	Paush-Magh	Chaitra-Baisakh	1000 -1500
9	Bittergourd	Coimbtore Long	Paush-Magh	Chaitra-Baisakh	1000 - 1500
10	Squash	Grey Zucchini	Paush-Magh	Chaitra-Baisakh	1000 - 2000
11	Bush bean	Four Season	Paush-Magh	Chaitra-Baisakh	1000 - 2000
12	Cowpea	Tane	Paush-Magh &	Chaitra-Baisakh	1000 - 1500
	,		Bhadra	& Kartik-Margh	
13	Pea	Arkel, Sikkim	Ashoj-Kartik	Margh-Paush	500 - 1000
14	Radish	40-days	Baisakh-Jestha &	Ashadh-Srawan &	1000 - 1500
_			Srawan-Bhadra	Ashoi-Kartik	
15	Carrot	New Coroda, Early Nantis	Ashoj-Kartik &	Margh-Magn &	1000 - 1500
			Paush-Magh	Chaitra-Baisakh	
16	Okra	Pusa Swani	Srawan-Bhadra	Kartik-Margh	1000 - 1500

#### Annex-III

# Summary of IPM Approach Demonstrated in Project Pockets, 2001

SN	Particulars	Palpa	Nawai- parasi	Kapil- bastu	Rupan -dehi	Kaski	Syngja	Total
1	Training:							
	Male	23	13	21	33	29	36	1 <i>55</i>
	Female	7	7	-	_	17	_	27
2	Demo on Heli-lure	90	-	-	-	-	60	150
3	Demo on Funnel Trap	15	-	-	-	-	10	25
4	Demo on Heli-NPV	8	-	-	-	-	5	13
5	Demo on Cucurbit-lure	45	24	46	-	93	36	244
6	Demo on Dorsalis-lure	45	8	16	-	31	12	112
7	Demo on Bottle Trap	30	16	30	-	62	24	162
8	Demo on Bioneem							

# AppendixRecommended IPM Approach on Selected Crop Pests at Different Project Pockets, 2001

Crops	Pests	District	Loss	Pest Status	Farmers Practice	IPM Approach
Cabbage and Cauliflower	DBM	Rupandehi	80%	Very serious	Frequent use of pesticides	<ul><li>Delta trap with <i>Xylostella</i> lure</li><li>Weekly application of NPV</li></ul>
Cucumber	Fruit fly Virus Mites	Kaski, Syangja, Kapilvastu, Nawalparasi	50%	Very serious	Chemical pesticides	Bottle traps with Cucurbita and Dorsalis lure     Immediate destruction of infested & damaged fruits
Tomato	Virus Fruit worm	Syangja, Palpa, Nawalparasi	40%	Very serious	Chemical pesticides	Funnel traps with heli-lure     Weekly use of heli-NPV
Citrus	Fruit fly	Kaski	60%	Very serious	Chemical pesticides	Bottle traps with Dorsalis & Cucurbitae lure     Immediate destruction of infested & damaged fruits
Eggplant	Root knot nematode Shoot & fruit borer	Rupandehi Rupandehi	90% 90%	Very serious Very serious	Chemical pesticides	Treatment of seeds, nursery bed, seedling dip and root treatment after one month of plant establishment Delta trap w/ Lencinode lure Weekly use of Spodo-NPV

# Summary of OFDs Conducted by Variety, Number and Year

The name of crops and varieties used in different years are summarized below. It has been reported that most of the varieties used were imported improved and hybrid seeds in the project area to find out the most suitable varieties which gives high productivity. The project has concentrated most in Tomato, Cauliflower, Cabbage, Cucumber and Potato. It also initiated in Parwal and in some fruits, papaya and banana.

Name of Crop	FY 1998/99		FY 19	999/00	FY 2000/01		
	Var.	No.	Var.	No.		No.	
·	4	60	13	the same to the same		6	
Cabbage	5	68	3		1	8	
Cauliflower - late	6	58			<del> </del>	6	
Cauliflower - early	1	13	9				
Radish	1	3	4	22	1	1	
Tomato	17	122				8	
Squash	5		<del></del>		,		
Onion	2	27				3	
Cucumber	2	33			2	6	
Egg plant	2					2	
Okra						4	
Hybrid maize (grain)	3				1	<del></del>	
Hybrid maize (green)	2				T		
Pointed gourd (Parwal)						2	
	1	3			1	<u>∠</u>	
Banana					1	2	
Bitter gourd	4	7	1 .	12	1	$\frac{2}{4}$	
			,	12		4	
			1	12		1	
Chilli				12	1		
Ridge gourd				6			
Beans		-	2	13			
					1	1	
						$\frac{1}{2}$	
	Cauliflower - early Radish Tomato Squash Onion Cucumber Egg plant Okra Hybrid maize (grain) Hybrid maize (green) Pointed gourd (Parwal) Capsicum Banana Bitter gourd Sponge gourd Asparagus bean Chilli Ridge gourd Sunflower Bottle gourd Pea (pod)	Potato Cabbage 5 Cauliflower - late Cauliflower - early Radish 1 Tomato 17 Squash 5 Onion 2 Cucumber 2 Egg plant Okra 5 Hybrid maize (grain) Hybrid maize (green) Pointed gourd (Parwal) Capsicum Banana Bitter gourd Asparagus bean Chilli Ridge gourd Sunflower Bottle gourd Pea (pod) Beans Papaya	Potato         4         60           Cabbage         5         68           Cauliflower - late         6         58           Cauliflower - early         1         13           Radish         1         3           Tomato         17         122           Squash         5         23           Onion         2         27           Cucumber         2         33           Egg plant         2         12           Okra         5         38           Hybrid maize (grain)         3         19           Hybrid maize (green)         2         22           Pointed gourd (Parwal)         2         22           Pointed gourd (Parwal)         3         19           Capsicum         1         3           Banana         3         19           Banana         1         2           Pointed gourd (Parwal)         4         7           Sponge gourd         4         7           Sponge gourd         6         14           Asparagus bean         1         2           Chilli         2         9           Ridge gourd	Potato         4         60         13           Cabbage         5         68         3           Cauliflower - late         6         58           Cauliflower - early         1         13         9           Radish         1         3         4           Tomato         17         122         16           Squash         5         23         2           Onion         2         27         2           Cucumber         2         33         3           Egg plant         2         12         6           Okra         5         38         2           Hybrid maize (grain)         3         19           Hybrid maize (green)         2         22           Pointed gourd (Parwal)         2         22           Pointed gourd (Parwal)         3         19           Capsicum         1         3           Banana         3         19           Bitter gourd         4         7         1           Sponge gourd         6         14           Asparagus bean         1         2         9           Ridge gourd         1         <	Potato         4         60         13         131           Cabbage         5         68         3         54           Cauliflower - late         6         58         84           Cauliflower - early         1         13         9           Radish         1         3         4         22           Tomato         17         122         16         101           Squash         5         23         2         9           Onion         2         27         2         53           Cucumber         2         33         3         26           Egg plant         2         12         6         14           Okra         5         38         2         22           Hybrid maize (grain)         3         19         19           Hybrid maize (green)         2         22         22           Pointed gourd (Parwal)         2         22         22           Pointed gourd (Parwal)         3         19         12           Sponge gourd         4         7         1         12           Sponge gourd         6         14         14           <	Potato         4         60         13         131         6           Cabbage         5         68         3         54         4           Cauliflower - late         6         58         9         84         4           Cauliflower - early         1         13         9         84         4           Radish         1         3         4         22         1           Tomato         17         122         16         101         7           Squash         5         23         2         9         9           Onion         2         27         2         53         2         9         0           Cucumber         2         33         3         26         2	

#### Annex-V

# Name of the Varieties used for On-Farm Demonstrations

	Year 1998/1999	Fiscal Ye	ear 1999/2000	Fiscal Year 2000/2001		
Crop/Variety	Crop/Variety	Crop/Variety	Crop/Variety	Crop/Variety	Crop/Variety	
Potato	Chilli	Potato	Zuchhini Squash	Potato	Cucumber	
NSI 7R	MHP 59	Cardinal	Green	Cardinal		
NSI 17	Tejeswani	Desire	G. Zuchhini	Desire	Bhaktapur local	
PM	Zuchhini Squash	Kufrijyoti	Onion		Maheco long	
NSI18	Bulam house (DS+C)	Kufri Sinduri	NS-53	Kufrijyoti	Poinset	
Cabbage	Z.Tin (DS+C)	NS-I	Rojo	MS 42-2	Super green	
Green stone	Z.Tin (transplanted)	NSI-11		NSI-6	Egg plant	
Green coronet	French Green (DS+C)	NSI-12	Cucumber	TSP	Local white	
K.K. Cross	F. Green (transplanted)	NSI-17	Bhaktapur Local	Cauliflower	Neelam long	
Zenith	Onion	NSI-3w	Long green	Madhuri	Okra	
T-621	N-53		Kusle	Kibojiant	# 12	
Cauliflower late	Sun Rojo	NSI-6	Egg Plant	Snow Mystique	Safari	
Serrano		NSI-7	Arkkeshab	Snow Crown	Barsa	
Ujwala	Cucumber: Variety –	NSI-8	MBTH	Cabbage	Sagun	
Kibogiant	DS (BL)	Local	Neelam long	Green Stone	Bitter gourd	
No. 071	DS + BPM	Cabbage	PPL	Green Coronet	Jhallary	
	DS + PT	Green stone	Shaurav	Zenith	White long	
Snow grace	Transplanted (seedling	Green coronet	Pusa Kranti	T-621	Coimbtore long	
Snowball-16	DS + C	T-621	Okra	Tomato	Asp. Beans	
Cauliflower Early	DS (LG)	Cauliflower	Arka anamika	CL 1131	Kashmire	
Indam Early	DS (Poinset)	Early snowball	Sagun	Ramiya	French Bean	
Radish	Egg Plant	Early 45 days	Bitter gourd	Manisha	Kentucky	
Tokinasi	Shaurav	Indam Early	Jhallary	PK (PP 70)		
Tomato	N-Hybrid	Indam Katiki	Asp. Beans	PK (PP 170)	Pointed gourd	
Nutan	Okra	Pusa Katiki	K-long	Rakshita	Local	
Avinash-2	Arka Anamika	Ramy	French bean	SC-1	Papaya	
Rashmi	Sagun	S. Ball-16	S-9		Madhubala	
Meghna	Parwani Kranti	Serrano	Four season	Radish	Madhumita	
Naveen 2000	Arka-4	Snow crown		Tokinasi	Banana	
Karna	Bhindi # 8	Radish	Papaya	Onion	Willium hybrid	
SC-1	Hybrid Maize (A)	Lumle red	Mayuri	NRN-53	Citrus	
Krishna	Pro-Agro 3438	Tokinasi	Madhubala	Nasiki red	Orange,	
Rupali	Bioseed 8196	40 days	Madhu			
SC-3	Pioneer 3056		Madhumira			
Ramya	Hybrid Maize (B)	Early 40 days	Ginger			
Naveen	Bioseed 8196	Tomato	Salyan sel.			
Manisha	Pioneer 3056	CL 1131				
Naveen 2000+		Gresco-1				
Abhiman	Capsicum	Gresco				
Arjun	Bharat	Avinash-2				
Menka	Ridge gourd	Indam 88-2				
	Supriya	Namdhari				
Bitter gourd	Sunflower	Apurva				
Jaunpuri long	GK 2002	Rupali				
Faizabadi	Pro-Agro	Ramya				
Jhallary	BIKI-hybrid	Naveen				
Coimbatore long	MSFH-8	Manisha				
Sponge gourd	Bottle gourd	Naveen 2000+				
White long	Ganesh	NS-815		<del></del>		
MSGH #10	Pusa Naveen	Rakshita				
MSGH #1	S-1	Abhiman				
Pusa Chillo	Gutka	Tropix				
Sarlahi black	Peas (Pod Yield)					
Taroi	Azad-2					
Asparagus Beans	Arkel					
		1	i	!		

# OFD Summary of FY 2000/2001

6		All Pockets							
S.	Crop/Variety	# of	Ingliest				# of pocket		
N.		farmer	yield (t/ha)	Yield (t/ha)		2001 P.M.	where OFD conducted or		
1.	Potato			<del> </del>		-	compared		
	Cardinal	7	18	25	Bedauli, RUP		1		
	Desire	7	15	20	Krishnapur, RUP	<del> </del>	1		
	Kufrijyoti	7	24.1	36	Bhagwanpur, KV				
	MS 42-2	8	12.12	20.4	KK				
	NSI-6	35	4.4	24	Ganeshtole PP		1		
	TPS	31	29	33	Mejhi, NP		1		
	All varieties planted	95	16.31	36	Bhagwanpur, KV	24.8	5		
2. (	Cauliflower					27.0			
	Madhuri	21	21	32	Lakadigadh, RUP	<del> </del>			
	Kibojiant	23	18.74	33	Tintiaap, PP		2		
	Snow Mystique	2	27	42	Shitalnagar, NP		2		
	Snow Crown	176	18.24	60	Fulbari, PP	-	6		
	All varieties planted	222	18.63	60	Fulbari, PP	16.15	6		
3. (	Cabbage				1 0000000, 1 1	10.13	0		
	Green Stone	44	35.2	71	Shivapur, KV		3		
	Green Coronet	42	28.56	49	Simalchautari, SJ		2		
	Zenith	8	30	35	Orlahawa, RUP		1		
	T-621	25	15.2	45	Mahadeva, RUP		2		
	All varieties planted	119	29.55	71	Shivapur, KV	23.37	8		
4. T	omato					25.57	0		
	CL 1131	144	*				1		
	Ramiya	122	25.24	60	Jhapardi, NP Pitlekh, SJ		3		
	Manisha	119	24.1	70	Triyasi, SJ		2		
	PK (PP 70)	1	*		Tityasi, 53		3		
	PK (PP 170)	7	*						
	Rakshita	29	*						
	SC-1	29	53.76	80	Patkhawa, KV		1		
	All varieties planted	451	27.8	80	Patkhawa, KV	24.63	l		
5. R	adish			-00	Tutkhuwu, Kv	24.03			
	Tokinasi	64	24	40	Bharthan, SJ		1		
_	All varieties planted	64	24	40	Bharthan, SJ	23.34	<u> </u>		
6. O	nion			70	Diarman, DJ	23.34			
	NRN-53	15	36.13	42	Deupura, KV				
	Nasiki red	26	18.77	30	Sundi, RUP		2		
	All varieties planted	41	25.11	42	Deupura, KV		2		
7. Cı	ucumber				теприги, ЛУ	18.93	3		
	Bhaktapur local	106	33.45	50	Masyangkot, SJ		2		
	Maheco long	30	15.77	21	Jhapardi, NP		$\frac{2}{2}$		
	Poinset	12	14.09	20	Patkhawa, KV				
	Super green	11	11.35	23	Bijgauri, KV		1		
	All varieties planted			50	Masyangkot, SJ	22.35	6		

					All Pockets		
S.		# of	Ave.		Highest	2000/	# of pocket
N.	Crop/Variety	farmer	yield (t/ha)	Yield (t/ha)	Location	2001 P.M.	where OFD conducted or
8.	Egg plant						compared
	Local white	10	27	30	Dubihawa, RUP		1
	Neelam long	5	35	40	Sunbarsa, RUP		1
<b></b> _	All varieties planted	15	29.67	40	Sunbarsa, RUP	17.60	1
9. (	Okra				7.00	17.00	1
<u> </u>	# 12	1	15				1
	Safari	3	25	30	Patkhawa, KV		1
	Barsa	2	22.5	30	Patkhawa, KV		1
	Sagun	14	20.71	30	Jagadishpur,KV		1
	All varieties planted	20	21.25	30	KV	14.30	1
10.	Bitter gourd					11.50	
	Jhallary	7	12.29	16	Gundi, RUP		2
	White long	4	17	21	Panitanki, NP		1
	Coimbtore long	3	11	16	Triyasi, SJ		1
	All varieties planted	14	13.36	21	Panitanki, NP	11.05	2
11.	Asp. Beans						
	Kashmire	30	10.78	18	Khairenidi, RUP		2
	All varieties planted	30	10.78	18	Rhairenidi, RUP	NA	2
12.	French bean						
	Kentucky wonder	11	10	12	Triyasi, SJ		1
	All varieties planted	11	10	12	Triyasi, SJ	11.42	1
13.	Pointed gourd						
	Local	38	*				
	All varieties planted	38	*			NA	2
14.	Papaya						
	Madhubala	1	*				1
	Madhumita	2	*				1
	All varieties planted	5	*			21.85	1
<u>15.</u> ]	Banana						
	Willium hybrid	22	*				2
	All varieties planted	22	*			22.58	2
16. (	Citrus						
	Orange, Mandarin	28	6.07	11.18	Lamgadi	6.80	1

<sup>\*</sup> On-going (during reporting period)

# **OFD** Summary of F.Y. 1999/2000

NSI-11	ets	-			Pockets				All Pockets			
Cardinal   33   22.77	ld 2000	Crop/Variety	# of Plot	Ave. yield (t/ha)	yield	1999/ 2000 P. M.	Crop/Variety	# of Plot	Ave. yield	yield	1 1999 2000 P. M	
Desire		4. Radish					8. Cucumber	+	(8.114)	(c/ma)	1	
Kufrijyoti 33   20.68   Kufri Sinduri 28   27.16   NS-I 2   28.81   50   NSI-11     13.6   I NSI-12     27.6   2 NSI-17     24   NSI-3w     11   NSI-6     25.2   2 NSI-7     21.6   2 NSI-8     12   Local 3   13   All varieties planted 2. Cabbage   Green stone   22   39.53   Green coronet   7   52.71    C-621   29   38.05   73   Cauliflower   27   27   Carly   8   18.52   Cauliflower   8   18.52   Cauliflower   11   18.32   Cauliflower   12   18.32   Cauliflower   14   12.11   23   Cauliflower   15   18.32   Cauliflower   16   18   Carly   17   18.32   Cauliflower   18   18.52   Cauliflower   19   19   19   Carly   10   18   19   Carly   11   18.32   Cauliflower   14   12.11   23   Cauliflower   24.8   Carly   30.4   60   Carrano   32   30.4   60   Carrano   32   30.4   60   Carrano   32   30.4   60   Carrano   2   24.8   Call varieties   84   20.81   60   Carly   24.8   Carly   24.8   Carly   30   40   Carrano   32   30.4   Carrano	69	Lumle red	4	1 50	55		Bhaktapur Local	16	23.97	52.4	-	
Kufri Sinduri 28 27.16  NS-I 2 28.81 50  NSI-11 I 13.6 I  NSI-12 I 27.6 2  NSI-17 I 24  NSI-3w I 11  NSI-6 I 25.2 2  NSI-7 I 21.6 2  NSI-8 I 12  Local 3 13  All varieties planted 2. Cabbage  Green stone 22 39.53  Green coronet 7 52.71  F-621 29 38.05 7:  All varieties planted 3.	32	4.1 Tokinasi	12	20.67	34		Long green	8	22.44	35	;	
NS-I	82	40 days	7	16.07	20		Kusle	2	10.50	) 11	<b>-</b>	
NSI-11	46	Early 40 days	3	8.75	12.5	<del> </del> -	All varieties		22.46	52.4	19.84	
NSI-12	.25	All varieties planted	22	23.94	55	13.47	planted 9. Egg Plant					
NSI-17	3.6	5. Tomato					Arkkeshab	4	0		ļ	
NSI-3w	7.6	CL 1131	5	17.40	41.5		MBTH	2	*	*	ļ	
NSI-6	24	Gresco-1	3	9.83	18		Neelam long	4	40.67	60		
NSI-7	11	Gresco	4	*			PPL		29.33			
NSI-8	5.2	Avinash-2	4	78.93	85		Shauray	8	8.75	37		
All varieties planted 22 39.53  Green stone 22 39.53  Green coronet 7 52.71  F-621 29 38.05 7:  All varieties planted 3.  Cauliflower Early 11 18.32  Indam Early 11 18.32  Indam Katiki 14 12.11 23  Itany 5 * *  Ball-16 3 11.87 12  Grano 32 30.4 (Indicate a second of the corone of t	1.6	Indam 88-2	6	31.09	60		Pusa Kranti	4	18.88			
All varieties planted 2. Cabbage Green stone 22 39.53  Green coronet 7 52.71  F-621 29 38.05 73  All varieties 54 40.18 73  Ball-16 3 11.87 12  Grand Carrano 32 30.4 (Carrano 32 30.4 (Carrano 32 30.4)  All varieties 84 20.81 (Cabbag) (Ca	12	Namdhari	2	67	80		All varieties	24	17 73	1		
Planted	15	Apurva	7	46.64	56		planted 10. Okra					
Cabbage   Creen stone   22   39.53   Creen stone   22   39.53   Creen coronet   7   52.71   Creen coronet   29   38.05   70   Creen coronet   34   40   18   70   70   70   70   70   70   70   7	82 13.2	Rupali	15	30.13	70		Arka anamika	11	12	16		
Green coronet 7 52.71  T-621 29 38.05 7:  All varieties planted 3.  Cauliflower Barly 8 18.52 modam Early 11 18.32 modam Katiki 14 12.11 23 modam Katiki 14 12.11 23 modam Katiki 14 12.22 modam Katiki 14 12.23 modam Katik		Ramya	6	67.25	90		Sagun	11	11.96	20		
T-621   29   38.05   73   73   75   75   75   75   75   7	60	Naveen	5	61.20	81		All varieties	22	11.98	20	10,4	
All varieties   54   40   18   72   3.	90	Manisha	19	40.26	83		planted I I. Bitter gourd					
Planted	.4	Naveen 2000+	7	46.53	83.33		Jhallary	12	19.54	30		
Cauliflower         8         18.52           Early snowball         8         18.52           Early 45 days         1 *         11           Indam Early         11         18.32           Indam Katiki         14         12.11         23           Pusa Katiki         14         12.22         2           Ramy         5 *         *           Ball-16         3         11.87         12           Gerrano         32         30.4         6           Inow crown         2         24.8	.4 21 22	NS-815	13	46.90	55	1	12. Asp. beans					
Sanowball   Sarly 45 days   1 *		Rakshita	7	59.73	91		K-long	6	13.17	25		
ndam Early 11 18.32   11 18.32   12   13   14   12.11   23   14   12.22   15   16   16   17   17   18   18   18   18   18   18	30	Abhiman	2	0			3. French					
Dusa Katiki		Tropix	4	*		- 19	S-9	9	10.89	19.2		
Pusa Katiki 14 12.22 Ramy 5 * *  Ball-16 3 11.87 12  crrano 32 30.4 ( now crown 2 24.8  All varieties 84 20.81 (	29	All varieties planted	101	43.17	91	21.6	our season	4	7.64	10.5		
Ramy     5 * *       Ball-16     3 11.87       cerrano     32 30.4       now crown     2 24.8       All varieties     84 20.81	.5	6. Zuchhini Squ	ash				All varieties	13	9.89	30	10.7	
Ball-16 3 11.87 12  crrano 32 30.4 (  now crown 2 24.8  All varieties 84 20.81 (	21	Green	-	24	24	1	planted 4. Papaya					
crrano 32 30.4 ( now crown 2 24.8    All varieties 84 20.81 (		G. Zuchhini	8	24.6	25		Mayuri	3 1	k ,	<b>*</b>		
now crown 2 24.8  All varieties 84 20.81 (	9	All varieties	9	24.53	25		/ladhubala	1 *		<b>+</b>		
All varieties 84 20 81	0	7. Onion					/ladhu	1 *	: ,	<u> </u>		
		NS-53	27	31.36	41		// // // // // // // // // // // // //	-   *		k		
pranted	0 14.5	Rojo		40.41	74		All varieties	6 *				
		All varieties		35.8		16 01 1	planted 5. Ginger					
	L	planted		- "			alyan sel.	10 *				

Note: P.M. = Performance Monitoring.

### Annex-VIII

# **OFD Summary of F.Y. 1998/1999**

Crop/Variety	# Loca- tion	Yield (mt/ ha)	Yield range (mt/ha)	Crop/Variety	# Loca- tion	Yield (mt/	Yield range (mt/ha)
<u>Potato</u>			(	Zuchhini Squash	поп	ha)	
NSI 7R	30	26.275	15.0 – 54.3	Bulam house	4	17.000	13.0 – 19.5
NSI 17	17	29.632	16.0 42.0	(DS+C)			
PM	6	21.138	16.0 - 43.0 $16.0 - 25.0$	(200)	4	27.622	21.2 – 40.0
NSI18	7	28.939		( )	4	45.250	2.00 - 106.0
	,	20.939	26.0 – 48.9	French Green (DS+C)	7	24.214	14.0 – 28.9
Sub total	60	26.496	15.0 - 54.3		4	9.850	5.0 – 20.9
Cabbage				Sub total	23	24.787	5.0 - 106.0
Green stone	23	40.507	16.0 – 75.0			445757	5.0 - 100.0
Green coronet	14	47.237	20.4 - 90.0		23	29.069	10.0 – 57.0
K.K. Cross	2	18.250	17.0 – 19.5	Sun Rojo	4	46.783	30.0 - 80.4
Zenith	25	38.306	16.0 - 75.0		27	37.926	10.0 - 80.4
T-621	4	19.250	19.0-20.0	Cucumber : Variet		tanur I	10.0 - 00.4
Sub total	68	32.710	16.0 - 90.0	DS (BL)	4	24.900	15.7 – 30.0
Cauliflower late				DS + BPM	1	40.800	13.7 – 30.0
Serrano	22	25.976	7.7 - 49.0	DS + PT	1	47.900	
Ujwala	11	28.367	15.9 – 40.0	Transplanted	9	21.416	20.0 70.571
				(seedling in polypot	,	21.410	20.0 – 78.571
Kibogiant	11	21.950	12.5 – 40.0	+ transplanted) DS + C		26 551	
No. 071	4	15.950	$\frac{12.3}{11.1 - 18.5}$	DS (LG)	4	36.751	19.4 – 43.9
Snow grace	4	12.615	5.7 – 17.2	DS (Poinset)	10	22.198	9.3 - 50.4
Snowball-16	6	9.519	$\frac{3.7-17.2}{2.0-14.6}$		4	31.500	20.0 – 42.0
Sub total	58	16.404	2.0 - 14.0	Sub total	33	32.200	9.3 – 78.5
Cauliflower Early		10.707	2.0 - 49.0	Egg Plant			
Indam Early	13	18.566	10.0 – 32.0	Shaurav	10	32.442	15.0 - 50.0
Radish	-15	10.500	10.0 – 32.0	N-Hybrid	2	37.000	_
Tokinasi	3	23.891	20.0 – 30.0	Sub total	12	34.721	15.0 50.0
Tomato		23.671	20.0 – 30.0	Okra			
Nutan	1	72.000		Arka Anamika	11	8.415	4.5 - 17.0
Avinash-2	6	91.350	65.0 – 135.0	Sagun	4	8.316	5.5 – 11.0
Rashmi	12	40.556	8.0 - 71.6	Parwani Kranti	8	15.614	3.9 - 25.0
Meghna	3	81.925	81.7 - 82.0	Arka-4	4	22.500	20.0 - 24.0
Naveen 2000	2	59.850		Bhindi # 8	11	14.735	8.0 - 24.0
Karna	9	52.185	40.0 – 79.7	Sub total	38	13.916	3.9 – 25.0
SC-1	4	27.667	30.0 - 90.0	Hybrid Maize (A) G			
Krishna	7		10.0 - 38.0	Pro-Agro 3438	1	7.777	
Rupali	17	36.167 52.800	$\frac{10.5 - 50.0}{7.0 \times 110.0}$	Bioseed 8196	8	5.681	3.8 - 10.6
SC-3	4	38.800	7.0 - 110.0	Pioneer 3056	10	6.725	5.4 – 9.2
Ramya		63.295	25.0 – 48.0	Sub total	19	6.728	3.8 – 10.6
Naveen			6.2 - 124.5	Hybrid Maize (B) G			
Manisha		69.496	22.2 – 124.5	Bioseed 8196	11		40000-118000
Naveen 2000+	2	64.140 47.420	$\frac{10.0 - 119.0}{35.0 - 59.8}$	Pioneer 3056	11	94858	46667-137500

# (contd..) Annex-VII

Crop/Variety	# Loca- tion	Yield (mt/ ha)	Yield range (mt/ha)	Crop/Variety	# Loca-	Yield (mt/	Yield range (mt/ha)
Abhiman	5	52.600	50.0 - 55.0	Canai	tion	ha)	
Arjun	2	18.766	7.5 - 30.0	<u>Capsicum</u> Bharat	<del> </del>	10.5	
Menka	3	44.667	$\frac{7.3 - 30.0}{38.0 - 48.0}$		3	10.375	5.0 – 16.5
Sub total	122	53.746	7.0 - 135.0	Sub total	3	10.375	5.0 16.5
Bitter gourd		55.770	7.0 133.0	Ridge gourd			
Jaunpuri long	2	29.875	29.0 – 30.75	Supriya		20,000	
Faizabadi	2	26.525	25.0 – 28.05	Sub total	2	29.000	28.0 – 30.0
Jhallary	2	15.000	13.3 – 16.6	Sunflower	2	29.000	28.0 - 30.0
Coimbatore long	1	13.333	13.5 10.0	GK 2002	4	2///	
Sub total	7	21.183	13.3 – 30.75	Pro-Agro		2.666	1.6 - 3.3
Sponge gourd		21.103	19.5 90.79	BIKI-hybrid	4	2.666	2.2 - 3.4
White long	2	33.000	32.0 – 34.0	MSFH-8	3	2.400	1.2 – 4.8
MSGH #10	2	23.333	23.3 - 23.3	***************************************	4	3.950	2.0 - 6.0
MSGH #1	<u></u>	26.667	25.5 - 25.5	Sub total	15	2.920	1.2 - 6.0
Pusa Chillo	1	5.000	-	Bottle gourd Ganesh		100.50	
Sarlahi black	4	12.159	10.0 – 13.137	Pusa Naveen	2	102.50	99.0 – 106.0
Taroi	4	12.403	11.5 – 14.4	S-1	2	113.00	106.0 – 120.0
Sub total	14	18.760	10.0 - 34.0	Gutka	7	32.619	20.0 - 43.3
Aspar. Beans	111 m fuf.en.str	10.700	10.0 - 54.0		7	26.667	15.0 - 36.6
BBT 8091	2	11.750	11.5 – 12.0	Sub total	18	68.696	15.0 120.0
Sub total	2	11.750	11.5 – 12.0	Peas (Pod Yield)			
Chilli		11.750	11.3 - 12.0	Azad-2	2	9.310	9.320 - 9.320
MHP 59	5	7.104	3.3 – 10.8	Arkel	2	7.810	7.8 - 7.820
Tejeswani	4	6.750		Sub total	4	8.560	7.8 - 9.3
Sub total	9	6.927	4.0 – 10.0   3.3 – 10.8				

# OFD Yield Summary 1998/1999

# District Rupandehi

Crop/Variety	p/Variety # of Yield Crop/Variety Location mt/ha		# of Location	Yield	
1. Potato		1220,224	5. Onion	Location	mt/ha
1.1 NSI 17	3	25.000	5.1 N-53	2	12.500
1.2 NSI 18	4	21.250	1 variety	2	12.500
1.3 NSI 7R	5	21.666	6. Okra	4	12.500
3 Varieties	12	22.639	6.1 Arka Anamika	4	( 750
2. Cauliflower			6.2 Sagun	4	6.750
2.1 Early variety:			2 Varieties	8	8.316
2.1.1 Indam Early	3	14.444	7. Cucumber	0	7.533
2.2 Late variety:			7.1 Long Green	4	10.050
2.2.1 Serrano	3	25.889	Proceedings of the Commission	4	10.250
2.2.2 Ujwala	5	30.300	8. Hybrid Maize	4	10.250
Late varieties	8	28.095	8.1 Poineer 3056		(2222)
Cauli Total (2.1+2.2)	11	21.269	8.2 Bioseed 8196	4	63333**
3. Cabbage		21.207	And the second s	3	46667**
3.1 Green Stone	8	43.021	2 Varieties	7	55000
3.2 Zenith	8	33.333	9. Bottle gourd 9.1 Gutka		
2 Varieties	16	38.177	·	7	26.667
4. Tomato	7.6	36.17/	9.2 S-1	7	32.619
4.1 Avinash-2	2	70.000	2 Varieties	14	29.643
	2	70.000	10. Bitter gourd o.g.		
4.2 Ramya	5	79.533	10.1		<del> </del>
4.3 Naveen	5	77.433	10.2		<u> </u>
4.4 Rashmi	1	40.000	2 Varieties		
4.5 Manisha	3	48.333	11. Sunflower		
4.6 Karna	3	58.133	11.1 GK 2002	4	2666
4.7 SC-1	2	20.000		4	2.666
4.8 Rupali	2	45.000		8	2.666
4.9 SC-3	2	32.500	2 ranenes	0	2.666
4.10 Krishna	2	42.500			
10 Varieties	27	51.343			

<sup>\*</sup> due to adverse weather condition the yields were too low.
\*\* Green cobs

o.g.= on-going

(contd..) Annex-VIII

OFI	<b>)</b> Yield	Summary	1998/1999	District	Kapilyastu
				District	MUUUVUSIU

C	JED Tiela S	ummary	1998/1999, District Kapi	lvastu	
Crop/Variety	# of	Yield	Crop/Variety	# of	Yield
1. Potato	Location	n mt/ha		Locatio	n   mt/ha
1.1 NSI 7R	7		7. Egg Plant		
1.1 NSI 7K 1.2 NSI 17	7	23.357		3	46.333
1.2 NSI 17	3	38.000	1 / Wite	y 3	46.333
	3	20.333			
3 Varietie	es 13	27.230		4	22.000
2. Cauliflower			8.2 P.K.	4	22.875
2.1 Early variety			8.3 A-4	4	22.500
2.1.1 Indam Early	8	23.750	2 Varietie.	s 12	22.458
2.2 Late variety			9. Cucumber		
2.2.1 Serrano	4	27.725	9.1 Long Green	3	42.133
2.2.2 Ujwala	4	19.800	9.2 Poinset	4	31.500
2.2.3 No. 71	4	15.950	2 Varieties	5 7	36.816
Late varieties	Market Brands and Committee Committe	21.158	10. Hybrid Maize		0,,0,10
Cauli Total (2.1+2.2)	) 20	22.454	10.1 Bioseed 8196	1	110000
3. Cabbage			10.2 Pioneer 3056	1	137500
3.1 Green Stone	3	45.000	2 Varieties	2	123750
3.2 Zenith	3	40.255	11. Ridge gourd		1.20.00
2 Varieties	7 6	42.627	11.1 Supriya	2	29.000
4. Tomato			1 Variety		29.000
4.1 Nutan	1	72.000	12. Sponge gourd		22.000
4.2 Avinash-2	1	135.000	12.1 White long	2	33.000
4.3 Rashmi	1	50.000	1 Variety	2	33.000
4.4 Karna	1	54.000	13. Pea		33.000
4.5 Krishna	3	56.667	13.1 Arkel	2	7.810
4.6 Rupali	2	56.765	13.2 Azad	2	(green pod) 9.310
4.7 D				2	(green pod)
4.7 Ramya	3	93.000	2 Varieties	4	8.560
4.8 Naveen	3	43.500	14. Bitter gourd		
4.9 Manisha	2	70.000	13.1 Jaunpuri long	2	29.875
4.10 Abhiman	5	52.600	13.2 Faizabadi	2	26.525
4.11 Menka	3	44.667	2 Varieties	4	28.200
4.12 Naveen 2000+	1	59.840	15. Zukini squash	<u></u>	20,200
12 Varieties	26	65.670	15.1 Z. Tin	2	35.000
5. Onion			15.2 Fresh green	2	23.500
5.1 N-53 (Nasik red)	13	36.817	2 Varieties	4	29.250
5.2 Sun Rojo	3	63.567	16. Asparagus Beans		27.230
2 variety	16	50.192	16.1 Bang B. tong 8091	2	11.750
6. Chilli			1 Variety	2	11.750
6.1 MHP 59	4	10.875	17. Bottle gourd		11./30
6.2 Tejeshwani	3	9.500	17.1 Pusa Naveen	2	113.000
2 Varieties	Contract to the second second	10.187	17.2 Ganesh	2	102.500
		5,500	2 Varieties	4	102.300

Note: \* due to adverse weather the yields are low.

# OFD Yield Summary 1998/1999

# District Nawalparasi

Crop/Variety	# of Location	Yield mt/ha	Crop/Variety	# of	Yield
1. Potato		and ma	6. Zukini	Location	mt/ha
1.1 PM	3	21.944	6.1 Zukini tin	1	
1.2 NSI 18	3	36.629		1	26.66
1.3 NSI 7R	5	35.224	TIE TIOSII STOCII	1	26.66
3 Varieties	_	31.266	2 Varieties 7. Hybrid Maize	2	26.66
2. Cauliflower		01.200	7.1 Pioneer 3056	+======================================	
			7.1 Flolleer 3036	5	62600
2.1 Early variety			7.2 Bioseed 8196	6	(green co
2.1.1 Indam Early	2	15 500	000		(geen col
2.2 Late variety		17.500	2 Varieties	11	62300
2.2.1 Serrano		27.000	8. Sunflower		
2.2.1 Serrano 2.2.2 Ujwala	6	37.833	8.1 BIKI-F1	3	2.400
	3	35.000	8.2 MSFH-8	4	3.950
2.2.3 Kibo giant	3	32.250	2 Varieties	7	3.175
Late varieties		35.028	9. Brinjal (Egg plant)		
Cauli Total (2.1+2.2)	14	26.264	9.1 Saurav	2	27.500
3. Cabbage			1 Variety	2	27,500
3.1 Green Stone	6	69.167	10. Chilli (0.g)		
3.2 Green Coronet	6	76.500	10.1		<del> </del>
3.3 Zenith	6	65.833	10.2		<del> </del>
3 Varieties	18	70.500	2 Varieties		
4. Tomato			11. Okra		
4.1 Naveen	2	108.250	11.1 Arka Anamika	3	8.444
4.2 Ramya	3	99.767	11.2 MBH-8	3	9.556
4.3 Krishna	1	35.000	2 Varieties	6	9.000
4.4 Karna	2	80.150	12. Cucumber		7.000
4.5 SC-3	1	48.000	12.1 Long green	3	14.211
4.6 Rupali	5	92.960	1 Variety	3	14.211
4.7 SC-1	1	25.000	13. Bitter gourd		14.211
4.8 Avinash-2	2	90.000	13.1 Jhallary	2	15.000
4.9 Manisha	2	97.450	1 Variety	2	15.000
4.10 Rashmi	2	58.350	14. Sponge gourd		15.000
4.11 Meghna	2	81.850	14.1 MSGH-10	2	23.333
4.12 Naveen 2000	1	79.700	14.2 MSGH-1	1	26.667
12 Varieties	24	74.706	14.3 Pusa Chillo	1	
. Onion			3 Varieties	4	5.000
5.1 N-53 (Nasik red)	4	35.750	15. Asparagus beans		18,333
5.2 Dark Red	4	32.500	(0.g)		
	8	34.125	15.1		
	•	J4.123	15.2		
ote: o.g. = on-going			2 Varieties		

### **OFD Yield Summary 1998/1999**

### District Palpa

Crop/Variety	# of Location	Yield mt/ha	Crop/Variety	# of Location	Yield mt/ha
1. Potato			5. Onion	Document	1110/114
1.1 NSI 17	4	32.124	5.1 N-53 (Nasik red)	3	35.278
1.2 NSI 7R	4	28.917	1 Variety	3	35.278
2 Varieties	8	30.520	6. Chilli		0002.0
2. Cauliflower			6.1 MHP-59	1	3.333
2.1 Serrano	6	14.768	6.2 Tejeswani	1	4.000
2.2 Snow grace	6	12.615	2 Varieties	2	3.666
2 Varieties	12	13.691	7. Egg Plant		2.000
3. Cabbage			7.1 Saurabh	2	31.000
3.1 Green Coronet	6	34.785	7.2 N. Hybrid	2	37.000
3.2 Zenith	6	34.109	2 Varieties	4	34.000
2 Varieties	12	34.447	8. Okra		
4. Tomato			8.1 Arka Anamika	4	10.050
4.1 Meghna	1	82.000	8.2 MBHS #8	4	12.650
4.2 SC-3	1	36.000	2 Varieties	8	11.350
4.3 SC-1	1	38.000	9. Cucumber		
4.4 Karna	1	37.000	9.1 B. Local	4	24.900
4.5 Naveen 2000+	1	35.000	1 Variety	4	24.900
4.6 Naveen 2000	1	40.000	10. F1 Maize		
4.7 Avinash-2	1	70.400	10.1 Bioseed 8196	4	4.499 (grain yield)
4.8 Manisha	2	59.500	10.2 Pioneer 3056	4	5.777
4.9 Krishna	1	10.500	2 Varieties	8	5.138
4.10 Naveen	3	48.800	11. Capsicum	22 <b>7</b> 02000000000000000000000000000000000	W. W. W. W.
4.11 Rashmi	8	13.876	11.1 Bharat	2	10.750
4.12 Ramya	5	18.383	1 Variety	2	10.750
4.13 Rupali	8	16.660			
13 Varieties	34	38.932			

# (contd..) Annex-VIII

# OFD Yield Summary 1998/1999

# District Syangja

Crop/Variety	or op, variety		Crop/Variety	# of	Yield	
1.5	Location	mt/ha		Location	mt/ha	
1. Potato			7. Cucumber		1416/144	
1.1 NSI 17	4	30.034	7.1 Bhaktapur Local (with	7	42.833	
			polypotting/Transplanting)		12.055	
1.2 NSI 7R	4	20.427	1 Variety	7	42.833	
2 Varieties	8	25.230	8. Bitter gourd		72.033	
2. Cauliflower			8.1 C. Long	1	13.333	
2.1 Kibo giant	5	14.200	1 Variety	7	13.333	
2.2 Snow ball 16	5	8.038	9. Sponge gourd	•	13.333	
2 Varieties	10	11.119	9.1 Taroi	4	12.403	
3. Cabbage			9.2 S. Black	4	12.403	
3.1 Green Stone	4	27.347	2 Varieties	8	0.0000000000000000000000000000000000000	
3.2 T 621	2	19.5	10. Zukini		12.281	
3.3 Green Coronet	2	30.427	10.1 Zukini tin	4	45.250	
3 Varieties	8	25.758	10.2 Fresh green	4	45.250	
4. Tomato			2 Varieties	8	9.850	
4.1 Karna	2	31.640	11. French Bean	0	27.550	
4.2 Arjun	2	18.766	11.1 K. Wonder	5	11 (00	
4.3 Ramya	4	25.791	11.2 Four Season	5	11.608	
4.4 Manisha	2	45.416	WWW.		10.444	
4.5 Avinash-2	2	33.000	2 Varieties 12. Radish	10	11.026	
5 Varieties	12	30.923	12.1 Tokinasi			
5. Egg Plant		30.723	***************************************	3	23.891	
5.1 Saurabh	3	24.936	1 Variety	3	23.891	
1 Variety	3		13. F1 Maize			
6. Okra	9	24.936	13.1 Bioseed 8196	1	118000	
6.1 P. Kranti	4	8.354	13.2 Pioneer 3056	1	116000	
1 Variety	4		2 Varieties	2	117000	
1 7 unery		8.354	14. Capsicum	1	10.00	

# OFD Yield Summary 1998/1999

### District Kaski

Crop/Variety	# of Location	Yield mt/ha
1. Potato		
1.1 NSI 17	3	23.00
1.2 NSI 7R	5	28.06
2 Varieties	8	25.53
2. Cauliflower		
2.1 Serrano	3	23.667
2.2 Kibo giant	3	19.407
2.3 Sb-16	1	11.000
3 Varieties	7	18.025
3. Cabbage		103023
3.1 Green Stone	2	18.000
3.2 KK Cross	2	18.250
3.3 Zenith	2	18.000
3.4 T 621	2	19.000
4 Varieties	8	19.000
4. Onion	v	10.312
4.1 N-53 (Nasik red)	1	25.0
4.2 Sun Rojo	1	25.0
2 varieties	2	
5. Cucumber (B. local)	<b></b>	27.5
5.1 DS + Black plastic mulch	1	40.0
5.2 DS + Plastic tunneling		40.8
5.3 Transplanted	2	47.9
5.4 DS + P. capping	4	29.4
4 Technologies	8	36.751
6. F1 Majze	0	38.713
6.1 Pro-Agro 3438	1	7 777
6.2 Bioseed 8196	4	7.777
6.3 Pioneer 3056	6	6.863
3 Varieties	0 11	7.674
7. Zukini	13	7.438
7.1 B. House (DSPC)		1= 0
7.2 Zukini tin (DSPC)	4	17.0
7.3 F. green (DSPC)	1	21.2
Varieties	4	22.475
	9 Continued in FY 19	20.225

Note: DS = Direct Seeding NA = Not available

DSPC = direct seeding with plastic capping

\* On going (during reporting period)

Note: P.M. = Performance Monitoring \* (

in FY 1999/2000
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<b>Crop/Variety</b>	_	Naw	Nawalparasi			Rig	Rupandehi	Γ		Koni	oile contra	ſ		1		l				-							
	7 00	\ \ \		-	ľ	Ľ			-	-	Masil			Palpa	ba	-		Syangja	<u>æ</u>	_		Kaski			IΙΑ	Pockate	
	Plot	vield	riignest	7000	# OI	Ave.	Highest	1999/	Jo#		Highest	1999/			ij	_		Ave. High	Highest 1999/	_	of Ave.	e. Highest	st 1999/	Jo # /6	Awe	Highest	1999/
		(t/ha)	(t/ha)	P. M.				P. M.		yieid (t/ha)	yield (t/ha)	2000 P. M.	Plot y	yield y	yield $\frac{2}{(t/h_a)}$	2000 F P M	Plot yie	yield yie	yield 2000		Plot yield			Ы			
1. Potato									T	1	+	T	+	1	_	1	1	_L	+	+	(Vna)	a) (Vha)	. Р. М		(t/ha)	(t/ha)	P. M.
Cardinal								T	T	1	1		+	210	2.1.0	$\dagger$		-	+	+							
Desire	Ξ	20.7	28.8		01	20.45	3	T	1	22.01	7	T	_1	0.17	C:/S	$\dagger$	7	33.2	69	4	12 18.1		30	33	3 22.77	69 /	
Kufrijyoti		T						T	+	10:57	I C	1	_L	-		+	L	4	-	4	-			28	8 21.39	32	<u></u>
Kufri Sinduri	Ξ	28.88	46		2	20.45	200	T	1	34.05	4	1	<del>-</del>	19.6	71.7	$\dagger$	77	29.6	82	4	12 16.	.7 21	1	33	3 20.68	82	L
I-SN		T	T	Ī				T	_	67.4.	₽	7	$\dagger$	+	+	7	$\dashv$			4			L	28	8 27.16	46	
NSI-11		T	Ī	T	$\int$		T	T	†	$\dagger$	1	1	+	+	1	+	-		22.6		1 3.	35 50.25	S		2 28.81	50.25	
NSI-12		T		T	Γ		T	1	$\dagger$	+	1	1	+	+	$\dashv$	$\dashv$			13.6				_		13.6	13.6	
NSI-17		T		T	T	Ī	T	T	+	$\dagger$	+	1	+	+	+	$\dashv$	1 2		27.6						1 27.6		
NSI-3w		T	T			Ī	1	T	$\dagger$	†	+	1	+	+	+	+	+	24	24	4				L	1 24	24	L
9-ISN				1	T	T	1	T	$\dagger$	$\dagger$	+	†	+	+	+	+	_		=	4					E		
NSI-7			Ī	T	T	Ţ	1	$\dagger$	$\dagger$	$\dagger$	†	†	+	+		$\forall$	12		25.2	4					1 25.2	25.2	
NSI-8		T	T	T	T	1		1	$\dagger$	$\dagger$	$\dagger$	+	+	+	1	+	7		21.6	Ц			_		21.6	21.6	
Local	T	T	T	$\dagger$	T				+		1	+	+	+	+	$\dashv$		12	12	_					12	12	
All Varieties planted	22	24.79	46	12.02	20	20.45	10	C FI	_	CI OC	C C	13.40	90	1	1				_1			$\dashv$	Ц	3	13	15	
2. Cabbage				Ī			~						25	0,03		61.01	77	27.2	82 9.16	6 25	28.1	1 50.25	5 14.39	9 131	22.79	82	13.2
Green stone	4	45.8	52.5		4	33.5	40	<b>†</b>	4	47.13	0 09	$\dagger$	7	45.5	5	+	+	$\downarrow$	+	$\downarrow$		_		1			
Green coronet		-					1	T		$\dagger$	+	$\dagger$			75	+	- 1	1		1	4 22.7	7 24		22		9	
T-621	4	52.4	9		4	33.5	45	1	4	30 13	55.0	$\dagger$	1	0 00	100	+	L		3	4				7	52.71	90	
All varieties planted	900	49.1	8	18.44	∞	33.5		20.75		41.12		100	Ş	7.7		, i	13		$\perp$					29	38.05	75.4	
3. Cauliflower	$\vdash$	I		T	T		100				15.7	1	-	# 7	22 14	14.70	14 45.9		26.3		8 20.3	3 24	24.49	54	40.18	75.4	21.22
Early snowball		<del> </del>			7	24.8	30		+	+	$\dagger$	$\dagger$	+	+	+	+	┸			1							
Early 45 days	$\vdash$	$\vdash$			Ť			T	+	+	$\dagger$	$\dagger$	+	+	+	+	D 10.4		27	4	$\prod$			8	18.52	30	
Indam Early	8	17.5	21		3	20.5	29		+	+	$\dagger$	$\dagger$	+	+	+	+	+	$\downarrow$	$\downarrow$	$\downarrow$		$\int$			*		
Indam Katiki	3	19	20		F	20.5	23.5	$\dagger$	-	11 17	125	$\dagger$	+	+	+	+		1	4					-1	18.32	29	•
Pusa Katiki	6	20.3	21	H	†	20.5	17.2	$\dagger$		2 7		$\dagger$	+	+	+	+		5	4	7	12.5	5 18		14	12.11	23.5	
Ramy	H	$\mid$	I	$\dagger$	+			$\dagger$	$\perp$	14:4	+	$\dagger$	+	+	+	+	7			2	7.63	3 10		14	12.22	21	
S. Ball-16	H	+		1	T	$\dagger$	$\dagger$	$\dagger$	+	+		+				+	$\downarrow$			4	*			5	*	*	
Serrano	6	33.5	45		٣	56.7	9	$\dagger$	+-	170	۶	$\dagger$			17.9	+				$\downarrow$	_1			3	11.87	12.9	
Snow crown	+	+	T	t	77	24.8	27.5	+	⊥.	+	77	+	+	+	+	+	3	3	8	<b>∞</b>	24.2	32.5		32	30.4	09	
lamed	23 2	24.32	45 1	13,44	2	30.98		14,39	17 13	13.58	30	15.25		011					-		- 1	- 1	- 1	7	24.8		
				1	1					7	1		1.	36	14.7 13.07	U/	/ 18.6		38 18.44	12	19.5	32.5	15.5	84	20.81	09	14.5

Result Summary of On-farm Crop Demonstrations Completed in FY 1999/2000

Crop/Variety	L	Nak	Nawalnaraci	ĺ	L	٥										.											
	30 #	Ľ		_	-		Illaniacin			Ya <u>p</u>	Kapilvastu			Palpa	pa			Svandia		L	3	Vocti	ſ				ſ
	i to	Ave.	Highest	7000	# of	Ave.	Highest				Highest		_		St	# /6661	of Ave.	e. Highest	est 1999/	)/ # of	Ave	Highest	1000/	-	ᅩᆷ	- 1	1000
	1 100		(t/ha)	2000 P. M.		yneld (t/ha)	yreld (t/ha)	2000 P. M.	Plot	yield (t/ha)	yield (1/ha)	2000 P M	Plot	yield y		2000 PI	Plot vield				yield	yield		Plot y	Ave. Hig yield yie	Highest 1	1999/ 2000
4. Radish									1				1	_L	-	.M	(t/ha)	a) (t/ha)	a) P. M.	_	(t/ha)	(t/ha)	P. M.	(t	(t/ha) (t/l		P. M.
Lumle red									₹	Ş	22	T		+	+	+	$\downarrow$	4	-						_	┢	Γ
4.1 Tokinasi	2	32	34		4	15	20		1	3	5	T	1	+	$\dagger$	+			-					4	Š.	155	Τ
40 days					4		2		1	+		T	1	+	$\dagger$	+	4	23	32	2		20		12 20	20.67	<u>%</u>	Τ
Early 40 days									<u> </u>	$\dagger$	1		$\dagger$	+	+	+	$\dashv$	4	_	3	17.5	20		7 10	16.07	22	T
All varieties planted	7	32	34	16.72	4	15	2	15.67	V	5	3	22.5	1	+	$\dagger$	+				3	8.75	12.5		3		12.5	Τ
5. Tomato				1					F	3	3	45.77	1	$\frac{1}{1}$		to. Sent	4	23	32 20.6	8 9	13.8	2	7.26	2.00			13 47
CL 1131				T	I	T		T	1	$\dagger$	1	1	+	+	+	$\dashv$	_										T
Gresco-1						Ī			†	$\dagger$	1	1		17.4	41.5	-	4							S	174	41.5	Τ
Gresco		T				T		1	$\dagger$	$\dagger$	1	1	7	14.8	82	+	$\perp$				0			9	l	2 000	Τ
Avinash-2	3	78.16	85			1		T	$\dagger$	+	1	1	+	+	+					4	*			4	$\vdash$	+	T
Indam 88-2					77	ß	9		$\dagger$	$\dagger$	1		+		+	+	$\downarrow$	$\downarrow$		_	81.3	81.25		4 78	78.93	85	Τ
Namdhari	7	29	œ	Γ					$\dagger$	$\dagger$	$\dagger$	1		0.12	<del>Q</del>	+	$\perp$		_					6 31	31.09	8	Τ
Apurva	9	46.08	99		-	8	50		$\dagger$	$\dagger$	1	T	$\dagger$	+	+	+	1	$\perp$	-					77	29	8	Τ
Rupali	4	41.75	52		7	20	5		3	61 67	707	T	+	+	+	+			$\downarrow$		1			7 46	46.64	Se	Τ
Ramya	4	75.87	82		7	9	8		_	1		1	+	+	+	+	٥	5	$\int$					15 30	30.13	70	Τ
Naveen	æ	99.89	81		2	50	57		$\dagger$	1	$\dagger$	+	+	+	$\dagger$	+	$\downarrow$	$\downarrow$	$\int$	4	*			6 67	67.25	8	Τ
Manisha	Ξ	69.54	83						$\vdash$		T	1	$\dagger$	+	+	+			$\int$		1			5 6	61.2	18	
Naveen 2000+		-							2	76.67	83 33	1	1,	27.5	55.5	+	٥		$\int$	77	0			19 40	40.26	83	T
NS-815					77	50	40			55	55	T		1 5	20.5	+	$\perp$				+			7 46.53	83	.33	Т
Rakshita		H			F	20	8	1	4	86.78	15	†		1 -	30.4	+	1			1	+			13 46.	6.9	55	Γ
Abhiman					$\vdash$			T		1	+	†	+	11	17	+	$\perp$		$\int$		0			7 59.	73	16	Т
Tropix					T		T	T	$\dagger$	+	$\dagger$	†	+	+	+	+	_			7	0			2	0	$\vdash$	Т
All varieties planted	33	63.22	83	22.22	12	20	8	18.4	1 5	0 49	120	70 00	_	1		L			1	4				4		┞	Τ
6. Zuchhini Squash									d			15.03	7 17	24.9	53.5 11.99	99 12			24.27	7	11.6	81.25	21.31	101 43.17		91 21	21.6
Green	r				$\dagger$	$\dagger$	I	1	+	$\dagger$	$\dagger$	+	+	+	$\dashv$	4											
G. Zuchhini	T	-	I	T	t	$\dagger$	$\dagger$	†	+	+	$\dagger$	†	+	24	24	4					-	-	T	-	24	2	T
All varieties planted	t		T	T	$\dagger$	$\dagger$	$\dagger$	$\dagger$	+	+	$\dagger$	+	$\perp$	70	20	4	18.9	25		3	33.8	37.5	-	8 246		1 ×	Т
7. Onion	t		T	+	$\dagger$	$\dagger$	1	†	+	+	$\dagger$	+	77	22	24	4	18.9			3	33.8	37.5	H	12		2 1 %	T
NS-53	7	32	39	T	۲	24.4	25	$\dagger$	+	2.7	19	$\dagger$		-	1	4					_	-		1		1	7
Rojo	7	45	48	$\vdash$	_	24.4	2 5	+	7 4	<u>ر</u> ج	3 5	$\dagger$		<u></u>	41	4				3	35	35		27 31.36		14	T
All varieties planted	14	38.5	48	15.1		24.4		16.67	_	38 33	10	21 44	7 47	۱,	_L				L	3	40	55		26 40.41	L	74	Т
							_				_#		1	# <sub>5</sub>	6///   C8	73 8	42.6	74	17.4	9	37.5	55 1	15.92	53 35.8		85 16 01	Ī
																							l	1			7

Note: P.M. = Performance Monitoring

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On going (during reporting period)

*
Note: P.M. = Performance Monitoring *
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		sama dal da	1 a S	-	_	Rupandehi	ehi	-	ľ	- doubling		F							J. Const.							
		_	_	# /6661	# of A	Ave. High	h=	1999/ # of	△	Napilvastu	(U	_	Ŀ	டி				Syangja			Kaski		F	A	Pockete	
	Plot	yield yi (Vha) (V	yield 2( (Vha) P.	2000 PI P. M.	Plot yie	yield yie (t/ha)						)0 Plot		4	2000	/# of Plot	Ave. F	<del></del>	00 00	# of A	Ave. Highest vield	hest 1999/	Jo # 06	Ave	Highest	<del></del>
8. Cucumber	F	$\vdash$	+	+	+		_	+	M(a)	(vna)	U F. M.	4	(t/ha)	(t/ha)	P. M.		(t/ha)								yieid (1/ha)	70007
Bhaktapur Local	Ĺ		+	+	+	+	+	+	$\downarrow$	4	+	$\dashv$	_					T	T	$\vdash$	+	+	1			1
ong green	£	27.33	35	+	1	25	1 20	+	<u> </u> :		+	2	33.3	38.4		4	0		T	9	317 5	1 63	7	23.03		
Kusle		-	+	+	$\perp$		7	+	4		17.5	4					-		T						52.4	
All varioties planted	~	27.33	35 11	14.45		152						_					$\vdash$		$\dagger$	+	+	+	~ (	1	35	
9. Egg Plant				2	4	707	25 21.06		3 12.83	3 17.5	2	7	33.3	38.4	14.57	7	1=		22.04	15	$\perp$		$\perp$		司	_
Arkkeshab	ļ	-	+	+	+	+	+	4	$\downarrow$								+	1	7	_1_	7.10	32.4 22.45	26	22.46	52.4	19.84
MBTH		+	+	+	,	+	+	4	$\downarrow$							4	10	$\dagger$	$\dagger$	+	$\downarrow$	+	1			
Neelam long		1	+	+		$\downarrow$	+	4	4		_						+	$\dagger$	$\dagger$	+	$\downarrow$	+	4	ী	1	
PPL	1		+	+	4	+	-	7	4 40.67		09					$oldsymbol{\dagger}$	$\dagger$	+	+	+	+	$\downarrow$	7	*		
Shairay	‡	13	+	+	_	+	-	4	4 29.33		04					$\dagger$	+	$\dagger$	$\dagger$	+	$\downarrow$	$\dashv$	4	40.67	09	
Pusa Kranti	+	/5/6	15/5/5	+	*	4	_				_					+	+	$\dagger$	$\dagger$	┙	4	-	4	29.33	40	
Allendade	- (	200	32	+	1	_	_					L		T		+	+	$\dagger$	$\dagger$	4			8	8.75	37	
10 Olymo	1	2 7	<u></u>	+	4			00	35	09	1		1.00 m		2,276	6	1	$\dagger$	+	_		5	4	18.88	32	
Arka anamika	#	1	+	4				L	L		_			7	ker Se	*	D			6 12.8		15	24	17.73	9	
Sagnin	+	51 51	2 :	4	$\perp$	5	6	3	15.33	16	<u></u>				T	+	+	$\dagger$	+	+	4	_				
	-	2 .	_1		4 8.5	5	=	3	19.17	20	Ĺ		T			$\dagger$	+	+	+	4	$\downarrow$		Ξ	12	91	
All Varieties planted	×	2	15.8	8.58	8 8.5		11 16.54	4	17.25		13.24	I	T	T	T	+	+	+	+	$\dashv$			Ξ	11.96	20	
Dunci gourd	$\perp$	1	$\dashv$	_	_			Ĺ	L				T	T		+	+	+	+	4	_		22	11.98	20	104
Juanaly 12 Arr L	4	15.5	6	~	5 28		30	3	10.83	511		I	1		†	+	+	+	+	4				-		
14. Asp. neans		-	-				L		_			1	1	1	1	+	+	-	-	_			12	19.54	Ę	
K-long	$\frac{1}{2}$	4		4	8.5		12	C	225	35			†	1	+	+	4	$\dashv$			L				3	
13. French bean		-			L	L	$\perp$			2			†	1	1	+	4				L		9	13 17	35	
S-9			L		19.2	19.2	<u> </u>	I	T		$\int$	1	7	1		$\dashv$			_	_		L			7	
Four season			_		L			I	T			1	†	1	1	4 10.	9.8	15		4 8.96	9.25		0	10.80	10,01	
All varieties planted					19.2	100	2 6 67	3	Ī				1	1	1	-		_	-	ـــ	L		_1	16.07	77.7	
14. Papaya			_			1		J	6			de de la constante de la const				4 10	10,8	15 5.	5.76	L	L	10.		+ O O	丄	
Mayuri				F	*		$\int$	1	1			1	7			H	_	1		L	1	┸		760.	3	10.7
Madhubala	_		-	E	*		$\prod$	1	1				+				L	_	L	*			*	†	+	
Madhu	_		L		*		$\int$	1	1			1	1	$\dashv$			L	-	H					+	+	
Madhumira		_	L	I	*		$\prod$	1	†			+	$\dashv$		$\vdash$	$\vdash$		-	$\vdash$				+	<u>.   ,</u>	+	T
All varieties planted				4	*							1	7	1			L	-	L				*	ψ,	+	T
15. Ginger	L		L						No.		ar m	4			A				Ľ	*				+	+	
Colvers and			_								,					-			•				*	1		

Result Summary of On-farm Crop Demonstrations<sup>1</sup> Completed in FY 2000/2001 by Pocket Annex X

# of Ave. far- yield Yield mer (t/ha) (t/ha) (t/ha) (t/ha) 31 29 33 31 29 42 44 5 24.02 46 24.02 60 38.43 60 60 38.43 60 60 60 38.43 60 60 60 60 60 60 60 60 60 60 60 60 60	Highest 2000/ Location 2001 Mejhi P. M. Mejhi 12.51 Shitalnagar Shitalnagar 16.71	# of Ave. far. yield mer (t/ha) 7 18 7 15 15 21 21 21 21 22 20.17	Highest Yield Location (t/ha) 25 Bedauli 20 Krishnapur 32 Lakadigadh 32 Lakadigadh 45 Mahadev	2000/ 2001 P. M. 13.57	far- y mer ()	Yield (t/ha)	Highest Location	2000/ 2001 P. M.
All varieties planted		(vh	Sunce I Sunce		far- y mer (0)	Yield (t/ha)	Location	2000/ 2001 P. M.
II  It  Int  It  Int  It  Int  It  Int  I		20. 20.	S Bed O Kris		Jar- y mer (0   7   7   7   7   7   7   7   7   7	Yield (t/ha)	Location	2001 P. M.
11 2 31 29 33 All varieties planted 31 29 33 All varieties planted 46 24.02 60 One Orone  Jone Jone Jone Jone Jone Jone Jone		1	25 Bedauli 20 Krishnapur 21 Lakadigadh 22 Sundi 24 Sundi	13.57	2112	36		1
oti 2 3.1 29 33 4.1 varieties planted 31 29  int int ixities planted 45 24 30  All varieties planted 46 24.02  For one  From to the translation of		91   102	25 Bedauli 20 Krishnapur 32 Lakadigadh 24 Sundi 45 Mahadev	13.57		36		
All varieties planted 31 29 33  All varieties planted 31 29  Int  i i i i i i i i i i i i i i i i i i i		20.	20 Krishnapur 32 Lakadigadh 24 Sundi 45 Mahadev	13.57		36		
All varieties planted 31 29 33  All varieties planted 31 29  In the control of th			32 Lakadigadh 24 Sundi 45 Mahadev	13.57		36		
All varieties planted 31 29 33  All varieties planted 31 29  Int  Int  Int  Int  Int  Int  Int  In			32 Lakadigadh 24 Sundi 45 Mahadev	13.57		3	Rhamonnir	
All varieties planted 31 29 33  All varieties planted 45 24.02  Own 45 24 30  All varieties planted 46 24.02  For one and other and othe			32 Lakadigadh 24 Sundi 45 Mahadev	13.57			awaiipui	
All varieties planted 31 29 33  NWET  In the control of the contro			32 Lakadigadh 24 Sundi 45 Mahadev	13.57		_		
All varieties planted 31 29  int  int  int  int  int  int  int  in			32 Lakadigadh 24 Sundi 45 Mahadev	13.57		-		
In the control of the			32 Lakadigadh 24 Sundi 45 Mahadev	16.77		1 1 36		١
Int Int Int Own Int Own Int All varieties planted Orone  All varieties planted  All varieties planted  All varieties planted  Int Int Int Int Int Int Int Int Int In			32 Lakadigadh 24 Sundi 45 Mahadev	16.77				15.57
All varieties planted 46 24.02  All varieties planted 46 24.02  One  Orde  All varieties planted		8	24 Sundi 45 Mahadev	16.77	_1	1		
own 45 24 30 All varieties planted 46 24.02  All varieties planted 46 24.02  one  or one  All varieties planted  All varieties planted  (61 38.43 60)  (70)	i ya	70.	24 Sundi 45 Mahadev	16.77		+		
All varieties planted 46 24.02  All varieties planted 46 24.02  Former Otto	pris .	70,7	24 Sundi 45 Mahadev	16.77	1. 1 1			
All varieties planted 46, 24.02  e one  from tronet  All varieties planted 61 38.43 60  (0) 61 38.43 50  (10) 70)		70.	45 Mahadev	16.77		27	Mohimm	
All varieties planted  All varieties planted  61 38.43  70)  110)			45 Mahadev			7	mma	
All varieties planted  All varieties planted  61 38.43  60)  100  110)			45 Mahadev			72		1/.61
All varieties planted 61 38.43 61 00) 61 16 43 70)	_			1	12	57 71 Ch.		
All varieties planted 61 38.43 61 00) 16 43 710)			-	1			Sinvapur	
All varieties planted 61 38.43 61 00) 16 43 710)		30	35 Orlahawa	Ŧ	+	+		
All varieties planted 61 38.43 61 00) 110)		L	45 Mahadev		+	+		
61 38.43 61 38.43 70) 710)		12.		33.3	15			
a 16 43 70) 710) a				5.77				25.5
a 16 43 70) 710) a		+		1				
24 43 16 43 17 10 16 43 17 10 11 12 17 10 11 11 11 11 11 11 11 11 11 11 11 11	ardi	24 25	45 Orlahawa		-			
Pp 70) Pp 710) uita	lia	24 25	40 Raminiamir	1	+	+		
10) T10)		ĺ	mdnunuma		+			İ
nta				†	+			
				1	+			T
ļ					20 53 76	SO Dathaham	e.mode.	
All varieties planted // 39.38	24.12	48 25		10.75	ı		allawa	3
5. Radish		ĺ		17.73				29.04
Tokinasi					1			
All varieties planted				1	-			
6. Onion					+	-	1	
NRN-53		-		1	15 26 12	1		
Nasiki red		9 24	30 Sundi			7	Deophia	
All varieties planted		9 24	30	14 47	15 36 1	12		33 13

<sup>1</sup> MARD provided only seed and technical advice. \* On going (during reporting period).

<sup>1</sup> MARD provided only seed and technical advice. \* On going (during reporting period).

	L		Nawa	Nawalparasi				Rup	Rupandehi		L		X	Kapilvastu	
		Ave.		Highest	2000/	to#	Ave.		Highest	2000/	Jo #	Ave		Highest	2000/
	far- yie	yield Y	Yield	Location	2001			Yield	Location	2001	33		Yield	Location	2001
7. Cucumber	-	丄	(Alla)		Y. M	шег	(Vha)	(t/ha)		P. M.	mer	(cha)	(t/ha)		P. M
Bhaktapur Local		_	T												4
Maheco long	61	<u>∞</u>	21.	Jhapardi							E	10 11	13.3	::	1
Poinset												_1_		Patkh, Bijgauri	1
Super green		L	Γ							floor	7	_1.		20 Fatkhahawa	1
All varieties planted	10	30	21		18.03			. 41		$\int$	= ?	ᆚ	57	Bijgauri	
8. Egg Plant		-			3	2. 2.		1			34	12.5			18.5
Local white		_				2	27	30	30 Dubihawa						$\perp$
Neelam long						S	35		Sunbarsa						$\perp$
All varieties planted					twint The	15	29			17.6		Ī			
9. Okra		_								2.7.					
#12		_									Ī	-	192		
Safari		L				T					1 6	75	5	Kuwagaun 5	
Barsa	_		$\vdash$			T					7	2 22	35	30 Fatkhahawa	
Sagun		-	T			T					7	27.5	30	:   :	
All varieties planted			- 6									20.71	OC.	30 Jagadishpur,	
10. Bitter gourd						Γ	Ī					61.63			*
Jhallary	2	00	10	10 Shitalnagar		S	14	19	Gundi			T			
White long	4	17	21 P	Panitanki								T			
Coimbtore long										Ī					
All varieties planted	9	14			10.99	3	14			12 98	1	T	T		
11. Asp. beans			-			T	T				T	T	T		
Kashmire			Н			5	15	81	Khairendi		155	70 6	13.3	13 3 Mohuma	
All variotics platted						N.	15			ΑN	12	0		, anima	
12. French bean			H			T	T	T			1		1		
Kentucky wonder		_	$\exists$			-	$\vdash$				T		T		
All varieties planted		- 0		A STATE OF THE STA							1	T			
13. Pointed gourd						T	H				T		T		
Local	15 *					23 *					T		T		
All varieties planted					AN		9 2 1 10 2			ΔN	T	T	1		
14. Papaya			-		T	T	T				+	1	1		
Madhubala	٠ د		-					T		+	1	T	1		
Madhumira	2 *		Н				T				t	$\dagger$	T		ļ
All varieties planted	\$				21.9	- M									
15. Banana			$\vdash$							+			1		
Willium hybrid			<u> </u>			17	-			T	t	$\dagger$	T		
All varieties planted						17				15.13	*		$\dagger$		200
16. Citrus		L	$\vdash$		T	+	1	1	1		•				2
						_	_	_			_	_	-		

Note: P.M. = Performance Monitoring.

ů.

(contd.) Result Summary of On-farm Crop Demonstrations 1 Completed in FY 2000/2001 by Pocket

Annex X

2000   of Ave   Highest   2000   for Ave   Highest   2000   for Ave   Highest   2000   for Ave   Highest   2000   for Ave   Highest   2000   for Ave   Highest   2000   for Ave   2000   for Av	Crop/Variety			ĩ	Palpa				Syangja	ıgja	-			Kaski				A	All Pockete		
Int			Ave.		Highest	2000/		1ve.	Ŧ	ghest	2000/		ve.	Highest	700	┺-	L-		Highest	2000/	# of pocket
1				Yield	Location		far- y			Location			<u> </u>	<u> </u>	<u>র</u>			<u>i</u>	Location	2001	where OFD
11   13   23   24   24   24   24   24   24   2			_	(Vna)			mer		(t/ha)		_			a)	<u>-</u>					P. M.	compared
1   13   14   24   24   24   24   24   24   24	1. Potato		1					-								-	L				
1	Cardinal											$\vdash$	_		_		L		Bedauli, RUP		
13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   Concatinole   13   44   24   24   Concatinole   13   44   24   24   Concatinole   13   44   24   24   24   Concatinole   13   44   24   24   24   24   24   24   2	Desire							H				_	_		$\vdash$	H			Krishnapur. "		
Manuacing planted   Si   Add   Contractionic   No   Si   Add   Contractionic   No   Si   Add	Kufrijyoti						_	-	_			_	_		$\vdash$		مُ	L	Bhagwanpur, KV		
13   24   24   24   24   24   24   24   2	MS 42-2							-					İ	0.4	-		1	Ĭ	KK		
All varieties planted   25	9-ISN	35	4.4	24	Ganeshtole		H	H				-	-		+	۳	1	24	Genechtole DD		
Mathematical Designation   Mathematical Design	TPS											-			$\vdash$	1		33	Meihi. NP		
Note   1   13   33   Tituliusp   12   24   30   Jagaripur   12   24   30   Jagaripur   13   25   30   Jagaripur   14   24   278   Jactus   25   25   30   Jagaripur   25   25   25   25   25   25   25   2	All varieties planted	35	4.4	24		10.84		H						0.4	15.		16		Bhagwanpur, KV	14.8	-   u
1   1   2   33   Tintiasp   12   2   30   Jagatrpur   1   2   2   30   Jagatrpur   1   2   2   30   Jagatrpur   2   2   2   3   Tintiasp   2   2   3   Jagatrpur   2   2   2   3   Jagatrpur   2   3   3   3   Jagatrpur   3   3   3   3   Jagatrpur   3   3   3   3   Jagatrpur   3	2. Cauliflower						-	$\vdash$				_			$\vdash$						,
1   13   33   Timitatop   12   24   30   Jagarpur   23   1870   31   Timitatop   12   24   30   Jagarpur   23   1159   1150   18   Jakeni   176   18   24   65   Timitatop   170   18   24   Timitatop   170   18   24   Timitatop   170   18   24   Timitatop   170   Timitatop   170   18   24   Timitatop   170   T	Madhuri		П									-	-		+	7			Lakadigadh. RUP		
Veryingue         45         15         29         Jakenjuur         1         29         29         Jakenjuur         2         27         42         Shindinagar, NP           vorm         45         15.06         12         24         24         27         83         11.59         18         48         15.06         Philbur, PP           one         1         2         27         24         2         23         18         18         18         18         18         18         48         15.06         Philbur, PP           one         1         2         2         2         2         3         4         11.58         2         18	Kibogiant	11	13	33	Tintiaap		12	24	30 Ja	ıgatpur					-	2			Tintiaan DP		- '
vorm         45   15.62         GO/Fulbari         124         27         24.2         17.8         43   11.59         11.59         22.2         18.6         Fulbari, Pp           All varieties planted         56   15.08         12.6         27         24.2         33   33   49 Strandolbandari         9   12.3   16.4   Dhurthpur         44   35.2   27   58   56   Fulbari, Pp           One         20         22         25   20   30 Jaganpur         12.8   20   12.9   12.3   16.4   Dhurthpur         42   28.56   49 Strandolbandari, RV           All varieties planted         3   20   30 Jaganpur         26.6   21   12.3   16.4   Dhurthpur         42   28.56   49 Strandolbandari, RV           All varieties planted         4   20   20   20   20   20   20   20   2	Snow mystique						-	29	29 Je	ıgatpur		-			$\vdash$	1	1		Shitalnagar NP		1
All varieties planted 56   15.08   12.6   27   24.2   13.9   17.8   49   11.59   13.99   12.2   18.63   66   Fall-Bach, Pall-pas    Location Planted P	Snow crown	45		09	Fulbari		14	24	27.8B	artun			. 59	18 Jalkeni	-	17	1		Fulbari PD		1 9
Colored Britancial Planted Britancia Planted	All varieties planted					12.6	<u> </u>	24.2			17.8		. 59		=	86			Fulberi Delm	16.16	٥
27   25   35   Vurner   27   25   35   Vurner   29   12.3   16.4   Dhurtpur   42   28.56   49   Simalchautari, SV   28.56   29   Simalchautari, SV   28.56   21   12.3   16.4   Dhurtpur   42   28.56   49   Simalchautari, SV   28.7   28.7   28.50   29.7   29.7   29.50   29.7   29.	3. Cabbage						-					-			-	+			mour, rapa	10.12	
Mil varieties planted   Mil	Green stone						27	25	35V	umre	Ī	-			$\dotplus$	+	ı		Shivanir KV		"
All varieties planted  All varieties planted	Green coronet						33	33	49 Si	imalchautari				6.4 Dhurbpur	$\perp$				Simalchaurari SY		
All varieties planted         5         20         30 Jagarpur         12 *         25         29         45 Instrument, RVD           All varieties planted         65         28.7         26.62         21         12.3         16.4         22.06         119         30.4         71 Shrivapur, RVD           10         34 *         3         45         60 Pitlekh         4         1144 *         1144 *         1144 *         71 Shrivapur, RVD           10         1         3         45         60 Pitlekh         7         1144 *         1144	Zenith						$\vdash$	<u> </u>				L			$\vdash$	Ĺ			Priahauva PITD		7
All varieties planted	T-621						5	20	30 Ja	ıgatpur	Γ		-		-	12			Mahadev RITP		- '
3   45   60 Pitlekh   144	All varieties planted							28.7			26.62	L	L	5.4	22	L			Shivanir VV	22.27	7
1   144 *								$\vdash$				1_			4		1		nπvapu, n.v	15.57	
a         34 *         9         9 tidekh         9         122         25.24         60 hapardi, NP Pitekh, SY	CL 1131							-	-				-		$\perp$	+					
a         1         7         20         70 Triyasi         Trivasi         7         Trivasi         87         80         Parthahawa, KV         80         80         Parthahawa, KV <td>Ramya</td> <td>34</td> <td>*</td> <td>i</td> <td></td> <td></td> <td>8</td> <td>45</td> <td>60 Pi</td> <td>itlekh</td> <td></td> <td>-</td> <td></td> <td></td> <td>_</td> <td>12</td> <td></td> <td></td> <td>fhapardi, NP</td> <td></td> <td>-   e</td>	Ramya	34	*	i			8	45	60 Pi	itlekh		-			_	12			fhapardi, NP		-   e
1	Manisha						79	20	70 Tı	ıvası		+	-		$\downarrow$	<u>=</u>	1	707	Tulekn, S.I.		ľ
710)         7 *         1         1         4         1         4         1         4 <td>PK (PP 70)</td> <td>1</td> <td>*</td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td></td> <td></td> <td>-</td> <td>-</td> <td></td> <td><math>\perp</math></td> <td>1</td> <td>*</td> <td></td> <td>iijasi, Oi</td> <td></td> <td>2</td>	PK (PP 70)	1	*				-	-	-			-	-		$\perp$	1	*		iijasi, Oi		2
a         29 *         14.13         2.0.9 *         14.13         2.0.9 *         14.13         82 20.9 *         24.08         144         29 \$ 3.76         80 Patkahawa, KV           All varieties planted         71         14.13         82 20.9 *         40 Bharthan         24.08         144         64 24         40 Bharthan, SY           All varieties planted         64 24         24 40 Bharthan         23.34         64 24 40 Bharthan, SY           3         17 16 20 Surkaundi         1	PK (PP 710)	7					H	H				-			-	L	*				
All varieties planted 71	Rakshita	29	*									_			-	25	*				
All varieties planted 71   14.13   82   20.9   24.08   144   144   14.13   14.	SC-1		1								П					25			atkahawa, KV	1	
ii         64         24         40         Bharthan         64         24         40         Bharthan         84         24         40         Bharthan, SY           3         3         17         16         20         Surkaundi         14,92         14,92         14,125,11         40         Bharthan, SY           1	All varieties planted	71				14.13		50.9			24.08	144	_		L	45	L		Pathkahawa KV	24 63	
All varieties planted         64         24         40 Bharthan         Bharthan         SY           All varieties planted         64         24         24         40 Bharthan, SY           d         17         16         20 Surkaundi         17         16         20 Surkaundi         14.92         41.25.11         42 Deopura, KV	5. Radish						H	$\vdash$				-	ļ.		-	-			1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	7	
All varieties planted 64 24 24 24. 23.34 64 24 40 Bharthan, SY 13 25.33 4. 26 24 40 Bharthan, SY 13 25.33 4. 26 24 24 24 24 24 24 24 25 Bharthan, SY 13 25.33 4. 26 Bharthan, SY 13 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25.33 4. 26 Bharthan, SY 14 25 Bhart	Tokinasi						49	24	40 B	harthan		H			H	9			Sharthan, SY	T	
13         17         16         20 Surkaundi         14,92         14,92         41,25,11         42 Deopura, KV           All varieties planted         17         16         20         14,92         14,92         41,25,11         42 Deopura, KV	All varieties planted						4	24			23.34				_	8			Sharthan, SY	23 34	
d  d  17 16 20 Surkaundi  18 70 30 Sundi; RUP  All varieties planted  19 8-13 42 Deopura, KV  26 18.77 30 Sundi; RUP  11 16 20 14.92 41 25.11 42 Deopura, KV	5. Onion								-			-			<u> </u>	H					
varieties planted         17         16         20         Surkaundi         26         18.77         30         Sundi; RUP           17         16         20         14.92         41         25.11         42         Dennutra RV	NRN-53							H							L	Ë		42 [	Deopura KV	T	-
17 16 20 14.92 41 25.11 42 December WV	Nasiki red						17	16	20 St	ırkaundi		_			L	77			sundi. RUP		1
	All varieties planted						17	16	20		14.92	_	_		L	4			Jeonina KV	18 03	1 6

Note: P.M. = Performance Monitoring.

<sup>1</sup> MARD provided only seed and technical advice. \* On going (during reporting period).

Result Summary of On-farm Crop Demonstrations Completed in FY 2000/2001 by Pocket Annex X (contd..)

Crop Marioty									İ										
-	_		raipa				Syangja	gja	_			Kaski				All Pockets	kets		
	# of Ave.		륍			Ave.	г	Highest	_		1	Highest	2000/	_	f Ave.		Highest	2000/	# of pocket
1	mer (Vha)	(Vha	Location	2001 P. M.	tar- mer	yield (Vha)	Yield (t/ha)	Location	2001 P M	far- yi	yield Yi	Yield Location	2001 D M		- yield		Location	2001	where OFD conducted or
7. Cucumber	$\ \cdot\ $								-	_	1_		+	T T T	-	(Vna)		Z.	compared
Bhaktapur Local	-	1			<b>98</b>	33	S0 M	50 Masyangkot		20 3	35.4	40 Lamgadi		106	6 33.45		50 Masvangkot, SY		10
Maneco long	+					+								ě	30 15.77	21			2
Supergreen	+				$\dagger$	+	1			$\dashv$	+			Ë	12 14.09		20 Patkhahawa, KV		
Super green	+				13	1	1				4				1 11.35		Bijgauri, KV		-
Aul vancues planted	+				92	33	1			30	35.4		27.66	6 159	9 27.13	50	Masyangkot, SY	22.35	4
l ocal white					$\dagger$	$\dagger$	+		1	+	+		-						
Neelam long	+				$\dagger$	$\dagger$			T	+			+	2	27		30 Dubihawa, RUP		-
All varieties planted					$\dagger$	+	+		1	+	+		+	1		40	Sunbarsa, RUP		1
9. Okra					$\dagger$	$\dagger$	+		+	+	+		1	15	5 29.67	40 Sun	40 Sunbarsa, RUP	17.6	-
# 12	-				$\dagger$	$\dagger$			+	+	+		+	1	1				
Safari					$\dagger$	$\dagger$	+		+	+	+		+	1					
Barsa					T	$\dagger$	+		+	+	+		+		2 2		30 Patkhahawa, KV	1	
Sagun	_				+	$\dagger$			$\dagger$	+	+		+		_	ð. (5		1	
All varieties planted	L					12.00							+	±   8		30 Jagac	Jagadishpur,	1	
10. Bitter gourd	$\vdash$				T	$\dagger$				1	1		+	77	67.17	30 KV		14.3	
Jhallary					$\dagger$	$\dagger$	+		+	+	+		+			3			
White long	_				$\dagger$	$\dagger$	+		$\dagger$	+	+		+		67.71	16 Gund	Gundi, RUP		2
Coimbtore long					+	1=	16 11-	Frivosi		+	+		1	4 ,	1	21 Panit	Pamtanki, NP	1	
All varieties planted					"	╬		- Ican	9 6 6	+	+		+			16 Triyası, SY	ısı, SY	1	
11. Asp. beans					+	+	1		6.50	+	+		1	4	13.36	21 Panit	21 Panitanki, NP	20.	2
Kashmire					+	-	-			+	+			(					
All varieties planted					$\dagger$	-	-		1	+	1		$\prod$	2 5		18 Khau	18 Khairendi, RUP	1	7
12. French bean				T	+	t	-		$\dagger$	+	+		$oxed{I}$	₹	10.78	18 Khaii	18 Khairendi, RUP	V.	7
Kentucky wonder					=	10	12 Triyasi	asi		+	+		$\prod$	=	2	12 Tivos; CV	· cv	$\dagger$	T
All varieties planted					11	10			11,42			l e		Ē		13 Toing		15,	-
13. Pointed gourd	-				H	H				-	-					12,111,98		11.42	1
Local					$\dashv$	$\dashv$				_				38				$\dagger$	
All varieties planted	1						5.00			296) 100			L	~				1	C
14. Papaya					+	$\vdash$			Н									5	7
Madhubala	1				+	+	1							3	*			_	1
Madriuma	<b>T</b>					-				4				2	*				-
15. Banana	-					ies] is <del>is</del>					1.04 1.05			S	•			21.85	-
William bybrid	+			$\dagger$	+	+	+	+	+	4	+								
AVIIIUM NYDIIG	+			+	+	+	+		$\dashv$	+	$\frac{1}{1}$				*			-	2
All varieties planted	1	1		7	+						104 104 105 105 105 105 105 105 105 105 105 105			22				22.58	2
le. Citrus	1			1	$\dashv$	$\dashv$	-												
Orange, Mandrin	]			1	$\dashv$	$\dashv$	-		-	28 6.07		11.18 Lamgadi	5.57	28	6.07	11.18 Lamgadi	adi	8.9	
																		1	1

Note: P.M. = Performance Monitoring.

<sup>1</sup> MARD provided only seed and technical advice. \* On going (during reporting period).

# Agro-vets Operating in the MARD Project Pockets, April 2001

N District		Agro-vet	Transaction Annual (NRs)	Quantity of Seed Sold (Dec-Mar) (kg)
1 Nawalparasi		J. B. Agro-vet Centre	102.600	3.113.00
		M. B. Veterinary Sewa	30.000	84.45
	<del></del>	Gopal Agrovet	100,000	123.55
		Mangal Veterinary	150,000	87.66
		Bhusal Agrovet	45,000	21.00
		Srijana Samuhik Agrovet	50,000	38.56
		Kshitij Agrovet	300,000	94.47
		Vijaya Veterinary Clinic	265,000	34.90
	1.9	Gyanwali Veterinary Clinic	360.000	30.90
Sub-Total	ļ		1,402,600	3,628.49
2 Rupandehi		Kisan Malkhad and Bisadi Bhandar	500,000	NA
		Burma Agro-vet	250,000	NA
		Siddhartha Agro-vet	500,000	NA
		Prakash Agrovet	300,000	NA
	2.5	Paswan Agro-vet	300.000	NA
Sub-Total			1,850,000	.NA
3 Kapilvastu		Gupta Agro-vet	800,000	203.00
		Puja Agro-vet	200,000	40.10
		Maurya Beej Bhandar	100,000	27.00
	3.4	Jagan Agro-vet	50,000	1,606.00
Sub-Total			1,150,000	1,876.10
4 Palpa	4.1	Tintiaanp Argro-vet Centre	480,000	1,536.00
·	4.2	Surya Agro-vet	180,000	359.30
	4.3	Bhattrai Agro-vet	1.800,000	243.00
		Shristi Agro-vet	1,200,000	230.50
		Raj Agro-vet	1.000.000	191.90
Sub-Total			4,660,000	2,560.70
5 Syangja	5.1	Baral Agro-vet	550,000	NA
		Mani Agro-vet (A)	700,000	231.10
		Mani Agro-vet (B)	150,000	NA
		Kafle Agro-vet	150,000	NA NA
<del> </del>	<del></del>	Adhikari Agro-vet	45,000	NA NA
		Paudel Agro-vet	40,000	62.20
		Janasewa Agro-vet	55.000	NA
		Co-operative Agro-vet	NA	NA NA
Sub-Total		oo sporanie i grover	1,675,000	
Kaski	6.1	Sthaniya Krishi Samagri Bhandar	340,000	<b>293.00</b> 178.30
		Bhagawati Bahudeshiya Agro-vet	260,000	17 <b>8.3</b> 0 54.30
		Samajsewi Agro-vet	NA	25.00
		Neupane Krishi Bhandar	600,000	23.00 90.70
		Krishi Samagri Bhandar	400,000	
		Samudaik Krishi Bhandar	100,000	58.50
		Shanta Krishi Depot		5.00
<del>                                     </del>		Janapriya Co-operation Depot	100,000	949.90
		Sanjeev Agro-vet Centre	130.000	2,058.00
			400,000	13.40
Sub-Total	0.10	Kisan Vivid Sewa	100.000	104.00
		1	2.660,000	<i>3,537.10</i>