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AN  
ASSESSMENT OF THE AGRICULTURAL SECTOR  
IN  
ZIMBABWE  
AND  
PROPOSED ASSISTANCE STRATEGY  
FOR  
USAID

United States Agency  
for  
International Development

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## 1. INTRODUCTION

### A. Summary:

Zimbabwe's position of being self-sufficient as well as an exporter of food and cash crops stems from a sophisticated and productive agricultural sector. It also reflects a policy environment and institutional system which has provided production incentives along with the support services necessary for high output levels. But the existing system is being challenged by a requirement to continue enabling, supporting and encouraging production by the numerically small, yet economically large commercial sub-sector while also rapidly stimulating expanded output in the densely populated smallholder areas, where production and productivity are much, much lower. <sup>1/</sup> Such an expansion in both sub-sectors and the more efficient use of currently under-utilized resources, both land and labor, is a cornerstone of the Government of Zimbabwe's (GOZ) "growth with equity" strategy. For this strategy to succeed, numerous constraints in the research, extension, irrigation, manpower development, land and water use, credit, marketing, input supply and planning areas must be relaxed. Success will also depend on the creation of increased off-farm employment opportunities because the on-farm agricultural sector cannot provide adequate employment opportunities and the target income levels for the entire rural population.

USAID proposes to support the GOZ strategy by providing assistance to reduce the above identified constraints with the objective of helping to maintain, and to create if necessary, a framework of self sustaining institutions which supply the smallholder with what he needs to increase output. The provision of additional resources will, in addition, allow the GOZ to continue on-going programs which are partly directed at the commercial sub-sector. <sup>2/</sup> Through its assistance, USAID will also seek to encourage the continuance of policies and programs that provide production incentives.

To achieve the above, a mixture of USAID assistance is proposed via a sector support approach that builds on the existing good GOZ capabilities to plan and implement agricultural development programs. Local currency support, training, commodities and technical assistance will be channelled to various programs in selected Ministries. Flexibility in programming USAID-supplied resources to meet changing assistance requirements is proposed, i.e.

<sup>1/</sup> It should be noted that in Zimbabwe a smallholder is not necessarily just a subsistence producer. A significant number of smallholders do produce for the market with about 25 percent, in value terms of smallholder output entering marketing channels.

<sup>2/</sup> Commercial, large-scale commercial and large-farm commercial are used interchangeably in this document.

the program will evolve from year to year as requirements and opportunities change. Simplicity in modes of administration of USAID assistance to allow effective management by a small USAID staff is also required.

## B. Methodology and Focus

The wealth of available material that led to the conclusion that a new, comprehensive sector analysis by USAID would be largely redundant is the source of most information in this document. Primary reliance has been placed on materials prepared for the ZIMCORD conference, regular GOZ publications, GOZ assistance proposals, sector analyses completed by other donors, studies prepared for particular development activities, and documents previously prepared by or for USAID. Annex D contains a fairly complete listing. These materials have been supplemented by discussions and meetings with a range of people in relevant government ministries. Only limited original data have been generated or collected. The strategy statement assumes that the reader already has some knowledge of the agricultural environment in Zimbabwe and, consequently, does not provide detailed background information (Annex A provides a brief sector description).

This paper is focused on a selected number of major or key agricultural/rural development problems. These particular candidates for assistance have been selected from a wider range of potential constraints based on U.S. expertise and backstopping capabilities. Because the area of concern is agriculture, certain larger issues in the rural sector, such as population, education, health and water supplies, are only briefly mentioned, if at all. Within agriculture, the focus is on small-holders rather than the large-farm commercial sub-sector. But as the two sub-sectors overlap, particularly as they are and will form part of an overall system serviced by the same organizations, there is a discussion of certain commercial sub-sector features. The commercial sub-sector is also utilized at various points for comparison purposes.

The result of the approach is a presentation that is biased toward small-holders from both overall agricultural and rural sector perspectives. However, the presentation does attempt to cover the relevant sector concerns, is quite precisely targeted and, we believe, provides a rationale for the strategy proposed.

## II. GOZ PLANS AND POLICIES

### A. Overall <sup>1/</sup>

The Three-Year Transitional Development Plan has not yet been finalized. Nevertheless, the ZIMCORD materials and subsequent publications provide the basic plan features including those for agricul-

<sup>1/</sup> Taken from ZIMCORD Conference Documentation: Zimbabwe Conference on Reconstruction and Development, GOZ Salisbury, March 1981, p.16.

ture and the rural sector.

Overall, the development efforts are directed at achieving equitable growth and development. The aim is to attain:

- (1) high rates of economic growth in all sectors and especially in the rural and smallholder agricultural sector;
- (2) more equitable and efficient distribution of productive assets, especially land;
- (3) more equitable distribution of income and income earning opportunities across racial groups;
- (4) high rates of growth of productive employment in all sectors and especially the rural sector
- (5) provision and extension of physical and social infrastructure especially in the rural areas; and
- (6) democratic and popular participation in the development process.

Preliminary GOZ estimates (still subject to change) are that GDP will grow at 8 percent per annum. According to ZIMCORD documents a total investment of Z\$3.898 billion (private and public) is planned with Z\$1.905 billion from the public sector.

#### B. GOZ Agricultural Sector Objectives

The specific agricultural sector objectives reflecting the overall aims of the GOZ are stated to be:

- (1) An acceptable and fair distribution of land use;
- (2) A rapid reduction in the levels of absolute poverty in rural areas together with an accelerated improvement in the standards of living of rural population;
- (3) An increase in both land and labor productivity in all forms of agriculture;
- (4) Substantial increase in employment for the rapidly growing labor force;
- (5) Achievement and maintenance of food self-sufficiency and regional food security;
- (6) Extension of the role of agriculture as a major foreign exchange earner and a source of inputs to local industry;
- (7) Integration of the two agricultural sectors, viz. commercial and peasant;

- (8) Conservation of land and the environment for future generations including a programme of conservation awareness;
- (9) Promotion of regional balance in agricultural development;
- (10) Development of human resources in the rural areas to the full potential;

To these might be added two additional objectives as specified in the ZIMCORD conference document:

- (11) Achievement of requisite improvements in production and distribution.
- (12) Strengthened agricultural services for commercial and peasant farmers alike, particularly veterinary services, agricultural marketing, commercial and peasant credit facilities, and agricultural research.

Preliminary plan documents postulate an agricultural sector growth rate of five percent per annum with smallholder agriculture growing at an even higher rate. <sup>1/</sup> Per the ZIMCORD documents, roughly Z\$950 million is to be invested in the broadly defined agricultural sector with the largest amounts budgeted for irrigation schemes, dryland resettlement, agricultural credit, rural roads and rural schools. Smaller amounts are targeted for agricultural research, marketing, and veterinary services.

C. Policy Environment for Agriculture <sup>2/</sup>

As indicated, overall development objectives and policies of the GOZ give high priority to activities in rural areas. This emphasis acknowledges, among other things, the importance of the agricultural sector as an employer, food producer and export earner. It also recognizes for "growth with equity" to be meaningful that the rural population must be provided with additional services and opportunities to raise productivity and production. In turn, for the desired effect to be realized, rural residents must respond to the services and opportunities. However, resources will not be committed nor new technology adapted if appropriate incentives and a suitable economic environment do not exist. Agricultural policies play a key role in determining incentives and in shaping the economic environment.

Fortunately, the GOZ recognizes the importance of producer price, input, marketing, trade and investment policies in stimulating

<sup>1/</sup> The actual rate achieved will depend partially on the pace and location of land resettlement activities. A very rapid program may jeopardize this target.

<sup>2/</sup> See also Annex B

production. The policy environment facing Zimbabwean producers might even be taken as a model for developing African countries. Prices of principal commercial crops are established at levels which take into account costs of production and a return on investment. Producer participation in this process is extensive and the government has used the price mechanism to stimulate and reduce production of various crops according to the supply/demand situation. Simultaneously, the GOZ develops, again with producer participation, estimates of needed input quantities and then collaborates with private sector input producers and importers to ensure that these quantities are available. The GOZ makes improved crop varieties from the research stations available to commercial associations enabling production of ample seed quantities at reasonable prices. Credit, primarily short-term, is available at competitive interest rates from both private banks and the Agricultural Finance Corporation. Marketing is the responsibility of several statutory corporations which have performed efficiently in handling widely fluctuating marketed production while operating country-wide facility networks. The Agricultural Research Council, with producer participation, allocates both government and private sector funds (about \$2 million annually) to work on critical agricultural problems. Agriculture has not been singled out to bear heavy taxes on exports nor to receive disproportionately low foreign exchange allocations. The foreign exchange rate has been allowed to vary. Past investments in agriculture have been substantial by both the public and private sectors. Future investment targets for agriculture/rural development are also significant. In general, the policy atmosphere has been one that has provided incentives to producers as well as the production inputs necessary to take advantage of these incentives.

But, it would be inaccurate to imply that all segments of the agricultural production community have been able to benefit equally from the set of in-place policies. The credit and marketing facilities have been concentrated in the large-farm, commercial areas. Guaranteed prices and markets are not established for all smallholder crops. Research has tended to focus on commercial crops in commercial areas. Smallholder contribution to the price establishment process has been limited, partly because it has been difficult to find smallholder representatives. In smallholder areas demand for purchased inputs has been low due to financial and knowledge constraints while additional transport costs and low volumes have reduced availability and raised prices. Thus, while policies provide production incentives and the means to take advantage of these incentives, these have been geared to the economically more important large-farm commercial sub-sector. Smallholders, many of whom already produce for the market, have not been as well served by the system.

For the future, changes are expected and underway. Seasonal credit is being made available to smallholders, cooperatives are being developed to provide better input supply and marketing services, additional research on smallholder crops and problems is being started, etc. This increased emphasis on smallholders, will undoubtedly mean,

given the limited manpower and financial resources available in Zimbabwe, policies more balanced in effect on smallholder and commercial producers. In implementing policies, certain sacrifices in GOZ services for large-scale commercial producers may be a necessary cost for changed distribution of services, income and production. An example is the minimum wage level which has recently been increased and which may lead to reduced output of more labor-intensive crops, although limited evidence suggests the main effect will be a reduction in employment. Likewise, a desire to allocate additional credit to smallholders or to expand marketing services, into new areas may exceed the availability of additional resources, i.e. some curtailment in previous services to the commercial sector may be necessary. Other examples are provided in the following discussion of particular constraints and in Annex B. Nevertheless, there is no expectation that the GOZ is going to greatly change the agricultural policies that have made Zimbabwe food self-sufficient and an important exporter. What will occur is the modification of policies to improve the environment and incentives for smallholders with perhaps less positive effect on commercial producers.

The key point is that altered circumstances and scarce resources dictate new and difficult choices. New policies and implementing tactics will need to be developed. This requires a growing sophistication in the GOZ in the analyses of the costs and benefits from decisions made, i.e. a greater analytic ability to examine, evaluate and project the impacts of changed or alternative policies. The historical information from which to start is available but additional data and increased capacity to analyze that data for decision-making purposes is necessary to ensure a continuing, positive policy environment.

### III. MAJOR CONSTRAINTS TO REACHING GOZ AGRICULTURAL SECTOR GOALS

#### A. Introduction

Zimbabwe is starting from a higher level than many developing countries in its efforts to achieve ambitious sector goals. The organizations and institutions necessary to support agricultural development already exist and operate quite efficiently and effectively. The infrastructure base by the standards of most developing countries is good. Significant numbers of trained people are available within the sector. The GOZ is following a set of policies which stimulate and provide production incentives to producers. Yet, there are a number of constraints to equitable growth from the level already achieved; problems which need to be addressed if expansion across the sector is to occur and if the sector objectives are to be met.

The constraints themselves are fairly conventional. The only difference in Zimbabwe is that currently they do not seriously affect a major portion of the sector - the commercial sub-sector. As indicated elsewhere, this sub-sector is really only constrained by

economy-wide problems, at least in the short-term. The identified constraints do, however, place serious limits on what can be achieved in the smallholder sub-sector. Without relaxation, only limited improvements can reasonably be expected.

In the following, we will look at what our synthesis and analysis indicates are serious constraints to expanded smallholder growth in production, productivity and marketed output. Several of the constraints overlap and there are links between many of them. It will be noted that certain important problems are not specifically examined e.g., livestock management, energy. These areas are excluded because of poor AID experience elsewhere in Africa or an intention that any AID involvement would be modest or via extension, research, etc. The planning and administrative problems facing the sector are not given separate treatment because they are mentioned implicitly and explicitly in the examination of other constraints. The order in which the constraints are discussed does not constitute a priority ranking.

#### B. Inadequate Physical Infrastructure

Physical infrastructure can include a wide range of facilities, structures or other constructed items of both productive and social types. Services resulting from or enabled by the infrastructure may be predominantly productive or social or a mixture. In this evaluation, the focus is on productive infrastructure. This is narrowed further to include only transport and storage. Certain other infrastructure such as marketing facilities and irrigation are discussed in separate sections as are facilities and housing requirements for effective implementation of government agricultural development programs. Electricity, rural potable water and other services are excluded because it is judged they are primarily of a social benefit nature or of lower priority.

Within the limits established, the commercial agricultural sub-sector is, in general, well serviced and/or equipped with infrastructure. The total road network consists of about 12,000 kilometers of paved road, 46,000 of gravel roads and 27,000 kilometers of earth tracks. Major highways and all-weather roads service nearly all commercial agricultural areas. Railway lines also pass through the more productive agricultural areas and are used extensively in moving agricultural input and output commodities. The statutory corporations handling marketing provide a large number of directly operated buying points, utilize about 300 approved buyers in more remote areas and possess a considerable storage capacity, both bulk and bagged.

But the physical infrastructure network does not provide adequate services to much of the rural population, was severely taxed by production at the exceptional levels achieved in 1980/81, is

concentrated in certain geographic areas, generally the more highly productive commercial regions, is often of poor quality, particularly the roads, and has reached the end of its planned life: the transport fleet and many all-weather roads fall in this category. For example, over 60 percent of the communal farms are more than 80 kilometers from rail access. Of the Grain Marketing Board's 50 or so depots over 75 percent are in commercial farming areas. The poor road system means communal area farmers must pay considerably more for input deliveries and output marketing.

Improvement of the road network and an expansion of the vehicle fleet serving remote areas are probably the greatest requirements. The GOZ has suggested that the target should be a gravelled road within 10 kilometers of all residents. In many areas, given the rather extensive network that already exists, meeting this target will probably require more upgrading than new roads. In other regions considerable new road construction will be necessary. The actual amounts have not been determined. The seriousness of the problem is emphasized by the ZIMCORD documentation which suggests that roads and road maintenance should be allocated more capital funding than rural health, rural schools, and rural water, etc. It will nevertheless, be critical to ensure that an economic basis exists for all roadwork undertaken.

Expansion of transport availability may be both a question of planning and incentives and an absolute shortage in the size of a deteriorating fleet. Reportedly, the more remote areas are poorly serviced until the transport demand in more easily accessible areas is filled. As indicated, costs charged are said to be excessive penalizing the smallholder resident in distant areas. Some of the higher costs undoubtedly reflect the poorer roads, the smaller quantities and the greater distances but if additional transport were available, competition would possibly reduce costs. Foreign exchange limitations currently prevent much expansion in the transport fleet.

As this constraint is relaxed experience in other countries would suggest small entrepreneurs will meet the needs. Also, over time, production and consumption will probably become more localized with reduction in certain types of transport needed. This process will be assisted as consumer subsidies are reduced. There is now an economic incentive for a farmer to sell all his maize and to buy subsidized processed maize meal with transportation requirements in both directions. Higher consumer prices would eliminate this incentive and encourage more local processing with a reduction in transport needs.

The requirements for marketing and storage facilities are similarly difficult to determine. Some producers, primarily smallholders, are up to 100 kilometers away from an established market depot but for maize and other grains a licensed buyer would normally be more accessible. This does not apply to cotton where depot delivery is necessary. The GMB has indicated that some 720,000 metric tons of permanent maize storage is available (Currently, because of the bumper crop, an equal amount is stored on temporary

platforms). The GMB believes an additional 150-200,000 metric tons of permanent storage is necessary plus any requirements that might be established as part of a regional food security reserve. A feasibility study on regional food security requirements is to be conducted shortly. Beyond that, alternative storage for other crops may also be needed but on a much smaller scale.

In addition, because storage, except for home consumption, has been a responsibility of the marketing organizations, rather than the producers, the storage sites tend to be in the areas of largest marketing production - in the commercial areas. There is very little storage in the communal areas. If the communal areas produce growing surpluses for markets, it will be increasingly efficient and necessary to provide storage in these areas.

C. Inadequate Trained Manpower to Service Small Farmer  
Sub-sector 1/

Compared to most African countries, Zimbabwe is very well endowed with skilled manpower. Yet, relative to quantities needed to implement ambitious GOZ development plans and to operate the sophisticated economy, there is a general scarcity. For the agricultural sector, the problem is particularly severe at all levels. At the highest or senior level, there is growing shortage of staff as experienced personnel retire, emigrate or seek positions in the private sector. Some examples: In the research area, more than 25 percent of the professional and technical posts are now vacant (45-170); in cooperatives, over 30 percent (26-84); in the Department of Agricultural, Technical and Extension Services (Agritex) there are 70 vacancies at Officer level (Diploma and Degree Posts) with many other senior posts filled with only recently appointed staff. The shortage is compounded by the creation and expansion of small-holder programs that require additional staff and by a desire not to cut back on existing programs.

Promoting less experienced staff is only a partial solution because there are also only limited numbers of staff at the middle strata. This reflects departures, modest employment levels in previous years and the small annual number of university agricultural graduates (15). Annual output of agricultural graduates from the University of Zimbabwe will increase in 1982 (40) and is projected to rise to 80 by 1987 but graduates will still lack experience.

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- 1/ Identified as a problem in (a) Zimbabwe Agricultural and Rural Development Sector Memorandum (Draft), IBRD, February 1981;  
(b) Zimbabwe: Country Economic Memorandum, IBRD, April, 1981;  
(c) Report of the General Identification and Programming Mission to the Republic of Zimbabwe, IFAD, August 1981; and  
(d) numerous other documents.

At lower levels, the smallholder contact points, the problem is equally serious. As of March, 1982 Agritex alone has 106 vacancies at the extension assistant and equivalent levels. The number of vacancies is actually growing as the colleges and institutions prove unable to supply the numbers needed for the expanding and new programs. At current output levels (55 Diplomates and 120 Certificate Holders annually), the tentatively planned trebling of extension assistants will require over 15 years assuming no demand from the commercial sector or other government bodies.

In addition to a sheer expansion in numbers, which is largely a function of additional facilities, there are also needs to offer new courses and to reorient or to add to training programs so the students/trainees are better equipped to meet the needs of the sector. At the University level, this means programs and courses in new areas such as horticulture and veterinary medicine; at the colleges and institutes, greater focus on understanding the needs of the smaller, less progressive farmers. Current programs tend to emphasize large scale production methods and techniques suitable for dealing with progressive farmers rather than the majority of the producers who have less access to critical resources. Efforts in curriculum design and development are indicated.

D. Inadequate Research and Extension Programs to Service the Small Farmer Subsector

1. Agricultural Research <sup>1/</sup>

Zimbabwe has a long agricultural research tradition, a complex research establishment and a relatively sophisticated research program. The outputs of this effort have been important factors contributing to the growth and diversification of the commercial sub-sector. However, although the research findings, improved crop varieties and recommended practices have been available to all farmers, there have often been constraints to adoption by smallholders, particularly those with a different resource base. Facilities tend to be located and the research has been largely conducted in higher rainfall areas while most smallholders are resident in lower rainfall zones. Little investigation has been carried out on smallholder production constraints and practices in areas such as power, soils, labor shortages, small-scale mechanization, mixed cropping. Nor has much work been done on traditional smallholder crops such as millet, cowpeas and bambara groundnuts. Research on the economics of smallholder production has been far too limited.

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1/ See sources previously mentioned for additional discussion of problem.

Thus, smallholders have not had the benefits of a research program examining their special needs and constraints. Combined with the lack of resources and access to production-increasing inputs, not unexpectedly, the smallholders have not been very successful in raising yields. Relative to commercial farmers yields and productivity have remained very low. For example, average maize yields in commercial farms are about 5 metric tons per hectare, average smallholder yields are less than 1 ton.

Inauguration of research programs focused on smallholder problems, crops, soils and ecological zones has been recognized as desirable, and necessary, by large segments of the research community. There is acknowledgement that a multi-disciplinary systems approach might be the most effective, given the links between the various elements of the small farmer production enterprise. But the already identified shortage of skilled and experienced manpower, the desire and necessity not to abandon work geared to the highly important commercial sub-sector and budget/facility constraints will combine to limit the range and extent of the programs. Nevertheless, it seems that the GOZ must seek to expand rapidly research programs dealing with smallholder food crops such as sorghum, millet and above all legumes, as well as with horticultural crops for both home consumption and sale. Livestock and pasture research relevant to the overgrazed smallholder areas needs expansion. Research on crops and technology for more marginal agricultural areas is also required. Finally, additional socio-economic and extension technique research and research on the smallholder within a system that imposes constraints and limits on what is possible is needed.

## 2. Extension Services <sup>1/</sup>

An official government organization concerned with improving the output of smallholder agriculture through the provision of information has existed in Zimbabwe since 1926. As early as 1934, the concept of Master Farmers and training to become Master Farmers were introduced. <sup>2/</sup> Over the years, these organizations and programs have been at least partly responsible for some notable changes in smallholder agriculture. Some examples would include the cultivation of cotton by smallholders who now market nearly 50% of total production, the use of hybrid maize by smallholders who account for one-half of the seed maize sales and the formation of Master Farmers' clubs with over 100,000 members who have qualified for membership by following certain agricultural practices.

Nevertheless, operation of the system has been far from optimal. Administration of the service has been vested in various organizations for varying periods, with the orientation altered

<sup>1/</sup> See in particular the IFAD paper, op cit.

<sup>2/</sup> To become a master farmer one must have attended a number of courses/demonstrations provided by the extension service, must have demonstrated a knowledge of proper production techniques on the individual farms and must have followed certain recommended practices such as the use of contours, fertilizer applications etc.

slightly with each administrative change. Staff turnover partly in response to administrative changes has been a problem throughout the years with a current ratio of farmers to extension staff of 7-800 which is worse than it was in the early 1960's. There has also been a policy to concentrate efforts on the more progressive Master Farmers, with the majority of the smallholders largely untouched. In other instances, the appropriate technology and resources to extend have not been available. Recently, as part of overall government economy moves, operating budgets have been reduced with a corresponding reduction in extension efforts. The result is a situation where overall smallholder productivity is low while land use problems are growing in severity.

With the recent consolidation of extension services for all sub-sectors of agriculture into one organization, a firm basis exists on which to build an effective service that can meet smallholder needs. The requirements to do this are multiple:

- (a) additional housing and transportation for existing staff;
- (b) additional staff with additional and more appropriate technology to extend;
- (c) additional use of techniques which extend scarce extension staff, i.e. radio, group extension, etc.;
- (d) in-service training to better train and prepare staff to deal with less progressive as well as progressive farmers;
- (e) additional research on small farmer needs linked to development of extension programs; and
- (f) facilities, equipment and operating budget to allow an expanded extension staff to carry out an expanded program in all areas.

E. Inadequate Credit, Input Supply and Marketing Institutions and Programs to Service Smallholder Sub-Sector Development

1. Credit <sup>1/</sup>

Although lending to smallholders has risen rapidly from \$1.1 million for 1,800 farmers in 1977/78 to \$11.0 million for 21,300 clients in 1980/81, the amounts are still minor compared to the commercial sector and the numbers minuscule relative to the total number of smallholders. The Agricultural Finance Corporation, the only official supplier of credit, plans to lend \$20.7 million to about 37,000 smallholders in 1981/82, reaching about 6 percent of the estimated rural families and no more than 20-25 percent of those

<sup>1/</sup> In addition to references already cited see: (a) Peasant Sector Credit Plan For Zimbabwe, The Whitsun Foundation, February 1980 and (b) Project Papers for Proposed IBRD Small Farmer Credit Program.

smallholders that produce significant quantities for the market. By 1984/85 the target is lending to nearly 65,000 smallholders at a credit level of \$54 million, still only modest numbers. In addition there are plans to provide credit to settlers. Depending on numbers settled this could reach nearly \$250 million for 150,000 settlers by 1984/85.

Constraints to expansion are multiple. The AFC as a statutory corporation has limited financial resources. Traditionally, the organization has been geared to the commercial sub-sector which has utilized the available funds. The demand from this sub-sector continues giving the AFC the unsatisfactory alternatives, unless resources are increased, of reducing profitable lending to the commercial farming sub-sector in order to increase higher cost lending to smallholders/settlers or to freeze smallholder/settler lending levels. If requirements for medium and long-term borrowing are added, the gap between credit supply and demand looms even larger.

It is also a different proposition to deal with 4-5,000 large loans per year or 40,000+ small loans. The AFC is a highly efficient agricultural finance organization for commercial farmers, but to service smallholders there are needs for additional equipment, including computer hardware and software, for additional staff and staff training and for alternative methods of handling the processing of loans. Ultimately, a greater decentralization of activities may be necessary to provide needed service in a timely manner. This could involve facility construction at various locations in the countryside.

Basically, the requirement is for the capital, to meet short and longer terms requirements, facilities, equipment and personnel to handle a larger loan volume and to serve a much larger clientele. There may also be a need for certain technical assistance in developing a capacity in smallholder lending. Successful development of the institutions and lending programs requires balanced improvements in these areas to meet an eventual target of some 100,000 smallholder borrowers plus a similar or larger number of settler borrowers.

## 2. Agricultural Inputs <sup>1/</sup>

In 1979, the last year for which data have been obtained, purchased inputs comprised less than 8 percent of gross output value in the smallholder sub-sector. While there may have been some improvement since that time, the general situation undoubtedly remains the same. Several reasons for the disparity can be cited. As indicated above, there was and is a shortage of credit and credit facilities and some smallholders with limited incomes consequently cannot afford the inputs. Other smallholders may not be aware of the benefits of the inputs. Also, smallholders simply do not have ready access to purchase

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<sup>1/</sup> See IFAD, op cit.

inputs at reasonable prices. Holdings are often located some distance from the nearest road and the nearest input supply point along that road may also be some kilometers away. The small volumes demanded do not greatly interest commercial suppliers and the farmers must pay higher transport costs. Cooperatives provide a main distribution network but they are non-existent in many smallholder areas and they lack adequate depots and distribution centers in most others. Membership in the nearly 400 cooperative societies has never comprised more than 5 percent of the smallholders.

The GOZ has recognized that availability of inputs is a prime requisite to use and has identified cooperatives as the appropriate mechanism for expanding access. Initial plans over a three-year period are to establish some 400 distribution/marketing points and about 40 major depots. The intent is that farmers should have to travel no more than 60 kilometers to obtain inputs and marketing services. Not all the necessary funding for the expansion has been secured. <sup>1/</sup>

A concomitant of such an expansion is a growing capacity in the GOZ to develop cooperatives and to provide necessary training and assistance to these cooperatives. The current Marketing and Cooperatives Services Section of the Ministry of Lands, Resettlement and Rural Development will need to expand its staff, or at least fill the vacancies, to meet the requirements. The Section also needs to position more cooperative staff in the field. A further long-term objective for the section would be to reduce its involvement in the day-to-day operations of the cooperatives as staff employed by the cooperatives are trained. This may require some reorientation of staff.

Finally, expansion of the cooperative movement may necessitate the establishment of a special AFC fund for cooperative lending to enable the cooperatives to finance large input supply and marketing activities. Current operating capital is provided through overdraft facilities with commercial banks. A cooperative bank that could utilize savings of members or rural savings clubs or unions in the rural areas might be an alternative.

### 3. Marketing

The physical aspects of marketing have already been largely addressed under "Physical Infrastructure" where it was noted that existing marketing organizations and facilities were generally geared

<sup>1/</sup> In the case of fertilizer there is also a requirement to plan the expansion of domestic supplies. Current production capacity cannot meet current demand. Consequently, any increase in demand will have to be met by imports unless a major investment program to expand local fertilizer production is instituted. See Preliminary Appraisal of the Zimbabwe Fertilizer Sector, International Fertilizer Development Center, October, 1981.

to the requirements of the commercial sub-sector.<sup>1/</sup> It was also pointed out that transport availability is a constraint on marketing, particularly in remote areas. There is, however, another aspect of marketing which also needs attention. This is the area of export marketing and export market development. Obviously, this is not exclusively a constraint for smallholders but as production of cash crops is encouraged, and in Zimbabwe food crops are also cash and export crops, it can increasingly become so. Potentially how important a constraint is demonstrated by the fact that, in value terms, over 45 percent of domestic agricultural production is exported. Any difficulties in maintaining and increasing that level will ultimately impact on smallholders as they attempt to increase marketed output. Maize and cotton are two examples of crops produced by smallholders where existing large stocks might eventually discourage production.

The constraints in this area stem largely from the sanctions period when Zimbabwe focused on certain export crops because markets for others were closed. There was also a reliance on the Republic of South Africa as an export market. Now there are political and economic reasons to increase the number of export markets and the range of products exported. In the latter area, Zimbabwe possesses good capabilities to produce additional crops and to process many of them. There may be crops well suited for smallholder production for which external markets exist. While the AMA has produced studies on market possibilities there is continuing need to identify markets for products which can be produced and then enter the markets. But the resources to identify these crops, develop the markets and involve smallholders in production and processing are lacking. Funding for studies, encouragement of external investors and the development of production and marketing strategies is required.

F. Insufficient Capacity and Resources to Plan and Undertake Programs in Improved Land and Water Use <sup>2/</sup>

The GOZ is committed to the effective use of available land and water resources. This involves the bringing into production currently under or unutilized land through resettlement programs, the development of government owned estates, the utilization of available water supplies in both large and small irrigation projects and the conservation of the irreplaceable soil resource. These objectives appear reasonable given the land pressure and erosion problems which already exist, the availability of under and un-utilized land and the availability of unutilized water and land suitable for irrigation. But implementation of activities to achieve the objectives in each face some or all of the problems - shortages of manpower, equipment and capital funding.

<sup>1/</sup> It might be noted that discussions are underway to have the Grain Marketing Board appoint the Cooperatives as GMB agents. This will expand marketing outlets in communal areas and enable many smallholders to receive better prices for their produce.

<sup>2/</sup> See in particular the IBRD, Agriculture and Rural Development Sector Memorandum, previously cited.

For resettlement programs, the largest immediate constraint is funding for the land purchase and infrastructure development. 1/ The British and the EEC are providing financial assistance and at least three other donors are discussing assistance to specific schemes. But there remains a large gap between available funding and that needed to implement firmly planned programs. 2/ Land clearing equipment and personnel and equipment to put in necessary water supplies are already in short supply. If government proceeds with plans to accelerate the program, a target currently being discussed is 162,000 families over 3 years 3/ physical planning may again become a bottleneck. There are also requirements to support the settlers with inputs, extension, credit, power, marketing and needed social services. The ability of existing organizations to provide these services for a greatly expanded program is questionable. Both funds and trained manpower are likely to act as constraints. Finally, there is a need to develop conceptual planning, implementation monitoring and evaluation capacities that will allow measurement of results and the reformulation of strategies being followed based on experience gained. For example, it is suggested that the current models may be too rigid and not well suited to planned settlements in lower potential areas, but without field feedback they may not be changed. Such a unit is being discussed in the Ministry of Lands, Resettlement and Rural Development but manpower availability is currently preventing its formation. 4/

While the principal problems are the same, there are some additional complications in estate development. An initial difficulty stems from the conflicting opinions over the direction estate development should take. Specifically, should estates aim for production or services to surrounding smallholders or some combination? What does this mean for the existing 14 estates? Since the structure of the development efforts will vary depending on the objectives, sound planning cannot proceed without resolution of this issue. There is also a question whether additional estates should be started and if so, on what basis? Some developed agricultural properties which have been abandoned and/or are for sale are not suitable for operation on a resettlement basis. There are other agricultural areas which will probably need to be developed on an estate basis, to keep investment costs down and to ensure production levels. In resolving both policy and direction issues and in planning estate development, the immediate problem is a shortage of experienced personnel to perform the analyses and planning. The Agricultural and Rural Development Authority (ARDA) is operating with a minimum experienced staff (only three experienced senior staff in the planning area)

1/ See Annex C for a more complete discussion of land resettlement.

2/ The full cost is estimated at some \$40-50 million per 10,000 families.

3/ Many observers believe this is probably unattainable in the indicated time frame.

4/ The unit would also have responsibilities in the planning, monitoring and evaluation of irrigation schemes and estates as well as in the general area of strategy planning.

and is being charged with an increasing number of activities. At a later point, there will be a requirement for considerable investment capital to implement the plans developed. For certain schemes which are well along in the planning process, the capital needs are quite imminent as are requirements to refurbish some of the existing estates including the provision of new equipment. ARDA as a statutory body does not possess this capital.

The expansion of irrigated areas can be divided into two general categories - large-scale and small-scale activities. The large-scale schemes are generally quite massive in scope and capital terms. Planning will necessarily be done by feasibility teams financed at least in part by outside investors or assistance organizations. This recognizes the problem ARDA and the GOZ would have in putting together a full feasibility/planning team and the desirability of involving interested parties from the outset. For example, there are almost no trained soils people in Zimbabwe at present. Involving possible financing organizations is particularly important as the GOZ will be seeking outside capital to implement these schemes. Specific schemes being planned are those in the Sabi Valley as well as in the Zambezi Valley catchment.

For small schemes, knowledgeable observers suggest that there are a large number of opportunities to increase the number using small dams, boreholes, and perhaps wells. While a number of these sites have been identified, there is no countrywide comprehensive survey nor have full feasibility studies been prepared for most of the identified sites. There are also a number of policy issues to be resolved. The current capacity to perform these tasks and the analysis required is limited. The MLRRD is very thin in terms of irrigation planning capability. Of four irrigation positions, only two are currently filled. Agritex is better staffed and can do some of the necessary planning but any program will need to compete with other extension efforts. The Department of Water Development in the Ministry of Water Development is over extended with planning village water supply let alone irrigation schemes. But even if plans for the development of small schemes were available, existing funds for the capital investments that will be part of any scheme are inadequate. The GOZ is hoping that outside donors will help meet this requirement.

The conservation of the irreplaceable soil resources is also a major and growing concern. At one time nearly all arable areas were protected by contours and grassed waterways. But many of these contours and structures have been allowed to deteriorate and new land brought into production recently has never been protected. This is a particular problem in the communal areas where soil losses are high and increasing as additional areas along streams and on steep slopes are being cultivated. It is also a problem in the river systems as dams are silting up and as flooding becomes more severe with the increase in rapid runoff after heavy rains. Effective efforts to address the problem are hindered by split responsibilities for soil conservation activities between several ministries and shortages of staff to carry out necessary planning and on-the-ground work.

#### IV. GOZ PROGRAMS TO ADDRESS CONSTRAINTS

##### A. Introduction

As has been indicated elsewhere in this document, the Government of Zimbabwe has on-going programs in all the identified constraint areas. Where programs are not underway on a large scale plans, which have not been implemented due to resource inavailability, almost invariably exist. The existence of these programs, unimplemented plans and the available capacity to formulate expanded and new programs, are a major justification for using the suggested strategy of sector support.

##### B. Ministry of Agriculture

The Ministry of Agriculture operates major research, extension and manpower training programs, with recurrent expenditures of about \$30 million annually. In research, a network of facilities conduct programs in most major crops,<sup>1/</sup> many minor ones, livestock and pastures. A program looking specifically at smallholder problems and including on-farm trials has been restarted this year.

The extension services cover both commercial and smallholder areas on a country-wide basis using a field staff of over 1,200. Extension efforts are concentrated on the major crops but also include programs in animal production, vegetables, conservation, horticulture and other minor crops. A combination of extension methods is used to reach farmers on a group and individual basis.

In the training area, the Ministry operates four training institutes providing diploma and certificate level training. A program to expand the facilities to meet the growing demand for additional manpower is being implemented.

Although largely independent, as a statutory body, the Agricultural Finance Corporation also comes under the Ministry. The AFC operates various lending schemes for both large-scale and small-scale producers. The Ministry does cover the expected administrative and other expenses shortfall in the small farmer credit scheme.

As statutory bodies, the various marketing organizations are also under the Ministry. These organizations have all put forward proposals to improve their operating efficiency. These range from Dairy Marketing Board proposals for bulk handling and collection points in communal areas to Grain Marketing Board and Cotton Marketing Board plans to increase/improve depots and storage capacity.

##### C. Ministry of Lands, Resettlement and Rural Development

A major responsibility of the Ministry of Lands, Resettlement and Rural Development, with cooperation from other Ministries, is the resettlement program. This on-going program has to date settled roughly 9,500 families on intensive and accelerated schemes with another 4,700 to be settled by June, 1982. Expenditures for these activities in 1981/82 will seemingly exceed \$35 million including

<sup>1/</sup> Tobacco, sugar and swine research are handled outside the Ministry.

costs of land purchase. <sup>1/</sup>

A second responsibility of the Ministry is oversight of the Agricultural and Rural Development Authority which handles the development of various estates and large-scale irrigation projects. Expenditures on development of these 14 schemes will exceed \$10 million in 1981/82 and is projected to reach \$24 million in 1982/83. Further expansion in the number of schemes is being discussed.

A third important program of the Ministry is that of Cooperative Development. Government is actively supporting the expansion of cooperative facilities and the formation of new cooperatives. Capital inputs for this program (for a revolving credit fund) will total roughly \$4.9 million in 1981/82 with recurrent costs of another \$2 million. In 1982/83, capital requirements are estimated at \$7 million. Efforts to begin a training program are just getting underway with plans available for a significant expansion.

A final Ministry responsibility is small-scale irrigation. Over 50 small schemes are currently supervised by the Ministry with improvements in existing and development of new schemes planned for the future. About \$2 million is budgeted for these activities in 1982/83.

#### D. Other

##### 1. University of Zimbabwe

The GOZ supports an expanding Faculty of Agriculture at the University of Zimbabwe. Annual intake has recently been doubled to 50 with plans for an additional expansion to 90 over a three-year period. Plans are also available for an expanded curriculum in terms of both length and course options.

##### 2. Ministry of Water Development

The Ministry has been allocated \$25 million in 1981/82 for water development activities. These include the planning and execution of both potable and irrigation water schemes.

#### V. OTHER EXTERNAL DONOR ASSISTANCE TO ADDRESS CONSTRAINTS

##### A. Introduction

Although nearly one year has passed since the ZIMCORD Conference, a great deal of fluidity still exists in donor assistance plans. Teams and individuals from various countries and organizations have visited Zimbabwe for the purpose of defining the ZIMCORD pledges but concrete plans under final design or implementation remain less than might have been expected. This is due partly to the long planning process which donors follow, partly to initial GOZ inexperience in dealing with donors and partly to the lack of complete feasibility studies and plans for various possible projects. The situation has

<sup>1/</sup> For additional detail, see Annex C.

been further exacerbated by delays in the finalization of the Transitional Three-Year Plan which was expected to provide both a broad framework of assistance requirements and the identification of specific projects which had high GOZ priority for funding.

As a consequence of the above, in certain constraint areas it is not possible to specify which program is definitely going to be assisted in what manner. All that is possible is to indicate that certain assistance organizations appear interested in funding support to various programs. In the cases where plans are firm, these will be identified.

#### B. Underway

The United Kingdom has committed roughly \$48 million for land resettlement with another \$25 million planned. The United Kingdom is also providing various short-term experts, under a technical cooperation agreement, and has supported the tsetse fly control program. A long-term training coordinator has recently been provided to the Agricultural Finance Corporation while research personnel in the areas of biometrics, plant protection and irrigation agronomy are also being supplied.

The World Bank, the EEC, the Italians and the Federal Republic of Germany are funding some regional planners while an expert from the Federal Republic of Germany is assisting in the planning and conduct of short-term cooperative training courses. The EEC has also provided funds for the development of six resettlement schemes (\$4 million). Equipment of various kinds has been provided by numerous donors including the FAO, Canada and Japan. Japan has also provided funding for the importation of fertilizer. Italy has supplied trucks for use in transporting maize and cotton while the Swiss have funded the construction of a Veterinary Assistants Training School and are funding a study of the Zambezi Valley. The Scandinavian countries have provided some assistance with specific aspects of specific resettlement projects - primarily school and health clinic construction. The IDRC is providing limited equipment and financial support to the Department of Research and Specialist Services for a research program on millet, and sorghum. Kuwait is funding a study of the Sabi Valley.

#### C. Planned

The World Bank is in the process of finalizing a small farmer credit scheme which would provide upward of \$45 million over a three-year period for credit, equipment and training. The Bank is also interested in supporting regional development, is examining a forestry proposal aimed at the establishment of village woodlots and will be fielding a team to look at the requirements for assistance in rural development/agricultural planning.

The Federal Republic of Germany is finalizing a medium/long-term rural credit scheme, is examining one or more resettlement projects and is planning to support the livestock dipping and extension program and the agricultural engineering training center. The Dutch Government

has agreed to support a settlement scheme, to provide a long-life milk plant and to assist with the bulk milk collection program. Norway is assisting with tanks for bulk milk collection. The EEC is planning to finance the buildings and equipment for the Faculty of Veterinary Medicine at the University of Zimbabwe and to assist the Department of Veterinary Services with the control program for foot and mouth disease. The EEC will also be providing skim milk powder for the milk reconstitution plant being established and additional funding for the accelerated resettlement program. IFAD has been examining assistance to agricultural extension and cooperative training. FAO plans include limited assistance to fisheries and bee-keeping and perhaps to small-scale irrigation while also supplying technical assistance in agricultural mechanization training and in veterinary assistants training. The ODA will be funding the expansion of facilities at Chibero Agricultural College necessary to accommodate a practical year for University of Zimbabwe agricultural students while continuing to provide technical experts. The Swedish Government is reportedly interested in being involved in the forestry area, with both equipment and technical experts, and in certain aspects of the resettlement program. The African Development Bank is examining assistance to a number of the resettlement schemes covering 4,400 families while negotiations for Kuwaiti funding for three schemes involving 4,000 families are well advanced. Australia is planning extensive involvement in the livestock area including personnel, equipment and training and may assist the new Faculty of Veterinary Medicine with personnel and equipment. Italy is interested in a number of rural water projects and Yugoslavia plans to support two irrigation schemes that have resettlement components. Greece has expressed interest in regional planning while Denmark may support the development of the Esigodini Agricultural Institute and the establishment of a groundnut hull briquetting plant. Romania is discussing some assistance to cooperatives. Several donors are offering scholarships and limited quantities of equipment useful in rural development.

## VI. USAID ASSISTANCE STRATEGY TO ADDRESS CONSTRAINTS

### A. Current

To date, USAID assistance in the agricultural area has consisted of local currency for reconstruction and development requirements plus very limited training and technical assistance. From the local currency generated by the sector grants of FY 1980 and 1981, support has been provided for:

- (a) Equipping the Mlezu Agricultural Training Institute and Chibero Agricultural College - \$462,000;
- (b) Cooperative Depot and Warehouse Construction - \$3,135,000;
- (c) Construction and Upgrading of Rural Marketing Depots - \$627,000;
- (d) Procurement of Grain Storage Tarpaulins - \$72,000;
- (e) Vegetable and Crop Seed Provision - \$4,717,000;

- (f) Extension Staff Training - \$663,000;
- (g) Irrigation Scheme Reconstruction - \$1,736,000;
- (h) Extension Housing - \$656,000;
- (i) Livestock Management and Health Centers - \$1,568,000;
- (j) Preparation of Irrigation and Rural Development Projects - \$784,000;
- (k) Bulldozers - \$784,000;
- (l) Horticultural Training - \$190,000;
- (m) Crop Inputs for Settlers - \$475,000;
- (n) Dip Tank Reconstruction-Rehabilitation - \$479,000; and
- (o) Research on Peasant Farming Systems - \$116,000.

From dollar funds, a technical consultant to the Agriculture and Rural Development Authority has been provided as has short-course training for a small number of Zimbabweans.

The assistance has been provided on the basis of GOZ requirements with concentration on a limited number of constraints not a primary concern. Nevertheless, it has been well utilized and an important factor in the GOZ's ability to undertake various activities supportive of long-term objectives. The assistance has also enabled USAID to examine and evaluate a wide range of programs and needs which in turn is reflected in the assistance strategy proposed below-

#### B. Proposed Strategy

As in suggested by the description of constraints, we propose that our agricultural sector assistance be concentrated on activities benefitting primarily the smallholder rather than the large-scale commercial sub-sector. This follows from the conclusion that the commercial sub-sector is in a position where it does not require the same degree of development assistance. It is productive, prosperous, can afford, and is willing to buy the technology, etc., required for continued expansion. Gross and net farm incomes in 1981 were the highest on record. The sub-sector is well serviced with physical infrastructure marketing and supply organizations and a wide range of locally manufactured products. Necessary inputs are generally available. Further, with the exception described below, the problems the sub-sector does face are either not subject to assistance (rising labor costs due to higher minimum wages or limits to increasing cropped areas as resettlement programs are implemented using underutilized land) or largely those of the larger economy and, in certain instances, will be addressed by other USAID assistance efforts. For example, the problem most often mentioned by commercial farmers is the scarcity of new, modern, imported equipment and spare parts. Clearly, this foreign exchange caused problem is potentially serious with the average age of tractors approaching

14 years and less than 1,000 tractors being imported annually into a fleet of some 19,000. Identical situations exist for other farm equipment not manufactured locally such as combines. Spare parts are also a problem and, as the equipment grows older, the requirement for spare parts increases, worsening the situation.

To resolve these and other foreign exchange problems requires an increase in foreign exchange availability. Longer-term prospects in this regard appear good. However, given the current deficit balance of payments position and competing demands for scarce foreign exchange, it is not likely in the short-run that sizeable additional amounts will be allocated for the importation of agricultural machinery and spares, petrol and other agricultural inputs. This is particularly true since other exporting sectors of the economy such as mining and manufacturing also are suffering from worn-out equipment and need imported inputs. Consequently, the solution to commercial agriculture's problem is tied to solving the larger foreign exchange problem. The USAID Commodity Import Program can be expected to help in this area, especially in the short-run.

A potentially serious problem facing the large-scale commercial sub-sector, somewhat specific to commercial agriculture, is the re-orientation and expansion of government services and resources toward the smallholder sub-sector. This will require some changes in expectations by commercial producers and development of channels outside government to provide certain types of needed goods and services. For marketing and input supply the problem appears minimal. For credit the commercial banks have always been a major source and may be able to meet needs the AFC does not. It is in the areas of research and extension that the impact will probably be most felt.

In agricultural research, there will likely be a fall in research output specific to the commercial sub-sector as resources are re-allocated and staff shortages continue. This may not be felt in the near term, but inevitably, in the medium term, there will be an effect if remedial action is not taken. In extension, the problem may be less serious as some alternative information channels are already available, but again there is likely to be effect. The commercial sub-sector is taking some steps in these areas. The establishment of non-government agricultural research facilities is being promoted. Tobacco and sugar are already well along in this area with the Commercial Farmers' Union now setting up a research farm to deal with some other major crops. Commercial companies such as the Seed Maize Cooperative Company of Zimbabwe are also embarking on research programs. Fertilizer companies and other input suppliers provide certain types of extension information. As long as it remains profitable to do business in Zimbabwe, these organizations will pick up part and perhaps most of the slack but costs will go up.

Although the primary target group is the smallholder, the USAID assistance program will also affect the commercial sub-sector in direct and indirect manners. By helping meet the costs and requirements of the expanded, re-oriented programs, more domestic resources will remain directed at crops and practices specific to

commercial areas. Assistance in expanding trained personnel numbers likewise will permit the staffing of a wider range of programs by both government and the private sector.

### C. Formulation of a Strategy

In most respects, once the smallholder sub-sector is targeted, the formulation of an assistance strategy is rather uncomplicated. The low productivity of the smallholder sub-sector, the under-utilized land and water resources, the growing population, the government commitment to equity and the major importance of the agricultural sector as a food producer and employer, export earner and raw material supplier point to support of the GOZ growth with equity strategy; a strategy that aims at improved utilization of land and water resources, that emphasizes growth in the smallholder sub-sector, that encourages the flow of resources to improve productivity of smallholders and that builds on the already existing orientation of smallholders to produce cash and food crops for market.

Yet because, as indicated, the economy of Zimbabwe depends heavily on the commercial farming sub-sector, the GOZ must also seek to maintain the production and productivity of these farmers. This requirement places some limits on what the GOZ can do but it also accentuates the importance that additional outside resources and support can have as they allow continued inputs to one sub-sector and a much higher level of inputs to another.

The strategy must also consider the planned inputs of other donors, the capability of the sector and sub-sectors to absorb resources effectively, the plans and priorities of the GOZ, the proposed level of USAID assistance and USAID Mission staffing.

Finally, in developing an agricultural sector strategy for Zimbabwe, it must be recognized that agriculture is in a period of rapid and dramatic transition. Old institutions and programs focused on the commercial sub-sector are being increasingly modified or expanded to include the smallholder sub-sector. The final shape of these programs and the administrative infrastructure to administer them remain to be finalized in certain instances, but it is clear that domestic resources, both manpower and financial, to carry out vastly expanded programs for smallholders are insufficient.

The situation of flux provides more requirements for assistance and opportunities for change than might otherwise be available. However, it simultaneously means that flexibility is necessary in the strategy, or at least in the implementing tactics, so adjustments can be made to meet changing circumstances. This flexibility must include both a willingness to support a mix of activities and programs that change over time as assistance and development programs have an impact and a willingness to fund both foreign exchange and local costs for commodities, program operation, facility development, training and technical assistance.

In implementation terms, it is suggested that the strategy be based on sector grants rather than narrow projects. Zimbabwe has

established implementation capacity and an ability to prepare logical, realistic plans. There is little evidence that the type of control imposed by project requirements is necessary for the effective use of resources provided. Rather the need is for additional resources so planned development activities can be carried out. Using a sector approach should also enable staff to engage the GOZ in a dialogue on a broad range of relevant development policy issues while avoiding the minutiae of implementing numerous small projects.

Nevertheless, to provide focus to the assistance and a meaningful level and impact, it is proposed that the sector assistance be directed at specific constraint areas rather than to the agriculture/rural development budget in general. This also recognizes our desire to be identified with certain areas, facilitates impact monitoring and corresponds to the way the GOZ organizes budgets and plans.

But where should United States resources be channelled to support the GOZ policy of growth with equity? On a general level, we believe implementing the strategy requires efforts on providing agricultural technology for smallholders, on the development of agricultural institutions and on the formulation of reasonable agricultural policies. The levels of assistance directed to each of these areas would not be parallel or balanced but reflect opportunities, GOZ priorities, other donor programs and United States capabilities.

The programs AID resources are expected to support will also be different between areas and vary from year to year. The needs in research differ from the needs in planning. Initially, the requirements appear to be skewed toward institutional development and training. But, once this base is in place, the requirements and emphasis will obviously shift to program content or to expansion of particular programs. Consequently, the sector assistance must also be flexible enough to accommodate these changes in requirements. The key is to have viable institutions, operating in a growth conducive policy environment, and extensive user participation in the system at the end. Charting a precise course to reach this end is not currently possible.

Initially, it is specifically proposed that United States agricultural sector assistance be channelled to: (a) training agricultural manpower; (b) strengthening agricultural research and extension organizations; (c) strengthening agricultural credit, input supply and marketing organizations; (d) expanding GOZ planning and administrative capacity in land and water use planning and implementation; and (e) improving overall agricultural planning and administration. Each of these areas is discussed in more depth below.

A note on what is excluded. Except for training and as a component of other activities such as research, extension or planning, support is not initially recommended, via the sector program, for livestock development, road and storage infrastructure or forestry. Any specific funding for credit would depend on how programs develop and whether other donors are able to meet needs. Assistance in soil and resources conservation will be via research and extension initially with a possibility of specific program support as GOZ programs develop and as responsibilities are clarified.

D. Components of the Strategy

(1) Training Agricultural Manpower

A primary theme of our analysis is that trained agricultural manpower at all levels is in short supply and an absolute requisite to the long-term success of institution building and development efforts. To assist in relaxing this constraint, it is proposed USAID provide support at several levels. At the university level, USAID should capitalize on the existing, capable faculty and well maintained but small physical plant and provide funding for the facility development and equipment necessary for the expansion to an intake of 90 students annually. USAID should also be prepared, if requested, to provide funds for teaching faculty and consultants in areas such as horticulture, agricultural economics, soils, veterinary medicine to meet the short-term teaching needs and to aid in curriculum development. Funding for external training of staff, both long and short-term, and for within Zimbabwe research on key development issues should also be provided to assist faculty and student development.

At the colleges and institutes, USAID should support facility expansion plans to allow needed growth in enrollment through funding for construction of classrooms, laboratories, dormitories, staff housing and farm facilities. Staff development should be supported through funding for external training. Provision should also be included for limited technical assistance in curriculum planning and development, particularly as required to adequately equip the graduates to work in the smallholder areas.

USAID support for manpower development in other areas is included in other components described below.

(2) Strengthening Agricultural Research and Extension Institutions Serving Smallholders

Agricultural research consistently shows high returns to investments as evidenced by commercial farmers using Zimbabwean developed varieties to produce a food crop surplus for export. Similar returns should be available for research on crops and problems of the smallholder - a largely neglected area. Yet, the deteriorated system and diminished manpower have reduced capacity to carry out the existing let alone a broader program. USAID should make a major contribution to the development of such an expanded research program and the network of facilities involved, based on GOZ plans. This contribution should be in terms of funding support for the refurbishment of depreciated facilities, for the construction of new facilities, particularly in smallholder and lower potential areas, for the procurement of needed scientific laboratory and field equipment, for the development of a farming systems research program, for the actual conduct of field research including on-farm research, aimed at smallholder problems, for the training of both senior and junior staff, and for the strengthening of links with regional and

international research organizations.

Parallel to the research assistance should be support for an expanded extension effort both in quantitative and qualitative terms. This will include funding for: (a) the improvement of technology transfer from the research institutions to the extension service to the farmer; (b) the physical and logistic facilities necessary for the extension staff to perform their tasks effectively, including farmer training centers and commodities; (c) in-service and farmer training to provide technical and extension knowledge; (d) further development of mass media or other cost-effective extension techniques; and (e) recurrent costs of expanded and special programs. It is expected that the majority of the support would be in the form of local currency. Only small quantities of foreign exchange for vehicles, selected audio-visual or reproduction equipment, and limited technical courses will be necessary.

(3) Strengthening Small Farmer Credit, Input Supply and Marketing Institutions

It currently appears that other donors will provide a significant part of the financial support necessary for a much larger small farmer credit program. The World Bank and the German Government are both in the process of finalizing funds provision packages. If these programs are not finalized, or the amounts provided are inadequate, USAID should be prepared to provide loan funds. In addition, USAID should be prepared to cover other needs which may constrain an effective program such as vehicles, office equipment, computer hardware and software, etc.

Support for input supply and marketing institutions should be largely via an expanded cooperative system with flexibility to assist other farmers' associations as appropriate. Funding assistance should cover both the capital costs of establishing a network of cooperative warehouses and depots and the costs inherent in the expansion of the Department of Marketing and Cooperative Services to stimulate and service a much larger system, e.g. staff housing in rural areas. Short-term professional assistance to conduct training workshops, funding for participation in international workshops, vehicle or motor bikes and funding for in-country training programs should be included in the assistance. In addition, as the GOZ continues with plans to establish a Cooperative Training College or Institute, funding to support that organization should be available. Finally, if the idea of a Cooperative Bank or a special window of the AFC to handle member savings and to serve as a source of capital for cooperative development develops, USAID should consider providing initial capital for and staff training for such a bank/window.

Depending on government ability to utilize assistance, funding might also be provided for export market investigation and development. This might be supported by assistance in local production and processing for export.

(4) Expanding GOZ Capacity in Land and Water Use Planning and Implementation

The GOZ is planning relatively large programs in land resettlement and estate development with a more modest effort in small-scale irrigation expansion. Implementation, however, is being, and will continue to be, slowed by shortages of planners and capital funds to implement the various projects. It is proposed that USAID support these efforts to maximize resource use in multiple ways. For land resettlement, USAID should be prepared to fund support staff for a planning and evaluation capability. This could include materials, equipment, training and technical assistance. To support the actual resettlement activities, USAID should make resources available for the completion of needed infrastructure, as well as the development of supporting institutions such as input and output marketing organizations. A particular area of support should be an expansion of water development capability.

For estate development, funding for both planning and feasibility study conduct should be made available. The planning assistance should be on a short-term basis and be focused on specific policy issues, development of scopes of work for feasibility studies or evaluation of on-going or proposed schemes. The feasibility study funds would help meet the foreign exchange requirements of the necessary investigations. Short-course training in management project evaluation and feasibility study conduct might also be funded.

In the irrigation area, funding for feasibility studies for the large schemes should be included in the assistance package. For the small schemes, assistance in expanding the capacity to evaluate and plan such schemes should be coupled with a capital fund for the execution of economically viable schemes. The capital funds, preferably, would be for the establishment of an irrigation scheme loan fund that could be tapped by both individuals and groups for development of small irrigation projects. Also to the extent GOZ funding is inadequate, provision should be made to support irrigation extension efforts on both old and new schemes. Finally, funding should be provided for irrigation research which could include the establishment of a small research farm specifically for this purpose and establishment of pilot schemes using innovative methods or technology.

Support for soil conservation will depend on development of suitable programs. As concrete proposals and plans are put forward AID resources should be allocated for this purpose.

(5) Improving Planning and Administration

Assistance in planning has already been mentioned in several of the proposed assistance areas. In addition to these more specific requirements, USAID should also make available both foreign exchange and local currency funds that can be used in over-all sector planning, in the examination of specific questions that cut across agricultural sub-sectors or areas and for evaluation and monitoring of development programs. It would also be desirable to

support the proposed provincial planning efforts. Similarly, funds for training in agricultural and provincial planning should be provided. A specific planning component or project is not proposed but only support for analytic data collection, evaluation and planning activities on an "as needed" basis.

As the agricultural sector expands and becomes increasingly complex, there is a growing need to keep administrative efficient. The required use of inexperienced staff in certain managerial positions increases the complexity of achieving this objective. Support for improved management should be provided through in-country, short-term training (perhaps at the University of Zimbabwe) and technical assistance on management issues as well as through support for external training in the management area.

## BRIEF DESCRIPTION OF

## THE

AGRICULTURAL SECTORA. Introduction

A basic feature that any description of the agricultural sector in Zimbabwe must recognize is the existence in the sector of three types of production areas, based on land holdings and tenure system. The first type is the commercial area which consists of large, privately-owned, mechanized units. There are 5-6,000 of these farms covering about 40 percent of the total area of Zimbabwe or 15.7 million hectares.<sup>1/</sup> Generally, this is a very productive sub-sector utilizing advanced agricultural technology, large quantities of off-farm inputs and excellent marketing and support services to produce at levels comparable to those achieved in North America. As a sub-sector, the commercial areas produce 70 percent of total agricultural output and 90 percent of marketed production. Within the sub-sector a relatively small percentage of the farms (less than 30%) accounts for about 80 percent of the production.

A second subset is the African Purchase Lands comprising 1.4 million hectares owned and farmed by some 8,600 private farmers. Agricultural production systems in these areas are based on lower levels of technology and input use. The areas are quite well served with input and marketing services and have access to credit. One in eight of these farmers has a tractor. Crop yields are lower than for the large commercial farms but well above the average in the communal areas.

The third type of area is the Communal Lands which encompass about 16.3 million hectares operated on a land assignment basis by an estimated 600-800 farmers. This subsector is the least productive and the poorest served by infrastructure, production services and available technology. Yields are generally low, reflecting low purchased input use, less advanced technology and the generally lower agriculture ecological potential of the areas. Greater attention is paid to food crops although roughly 25 percent of the total output, in value terms is marketed. Fertilizer use and interest in cash crops is increasing.

While each of these different areas has some unique and distinct features, and probably deserves separate treatment, to reduce complexity this description generally uses only smallholder and commercial categories, the smallholder category including both the African Purchase farmers and the communal land farmers.

B. Role of Agriculture

Somewhat atypical for a developing nation agriculture is not, in economic terms, the largest sector in the Zimbabwean economy. Its contribution of 13-16 percent to GDP (4-5% from the smallholder sub-sector) is surpassed by that of manufacturing (25%) and closely

<sup>1/</sup> Urban areas are also included in this total but account for a very small percentage.

followed by distribution (11-12%) and public administration/defence (11-12%). Nevertheless, in employment terms, the agricultural sector is predominant, providing over one-third of wage employment as well as a source of income for the 50-60 percent of the population resident in the smallholder areas. The sector also is a large and growing source of foreign exchange through exports of food (sugar, maize, beef) tobacco and cotton. In 1980, the last year for which a breakdown has been obtained, agricultural produce made up about one-third of total exports. Finally, it is estimated that the sector as a producer of raw materials or a consumer of finished products is involved in supporting the majority of the manufacturing industry in the country.

Growth in the value of sector output has been relatively modest during the past few years averaging less than three percent per annum during the 1975-79 period. The value of production in the smallholder areas is estimated to have actually declined by 12 percent during this period reflecting poor weather and the impact of the war. However, in 1980, sales of crops and livestock rose by 31 percent to \$683 million and, led by a bumper maize harvest, it is estimated that agriculture could contribute over 20 percent to real growth in 1981.

In the foreseeable future, agriculture as a sector will face very considerable demands. First, it will need to continue feeding a population growing over 3 percent annually. Second, the agricultural sector must provide direct opportunities for currently impoverished smallholder families to attain considerably higher living standards. Third, if Zimbabwe is to be able to import necessary capital and consumer goods, the sector must continue to be a major foreign exchange earner. Fourth, the sector must supply raw material for the industrial growth needed for long-term economic progress. Fifth, the sector, and the small and large scale industries built on its raw materials, must provide employment for a large proportion of labor force entrants. Sixth, the sector will need to be a source of the government revenue needed to maintain and expand social and economic services. Finally, to stimulate industrial production the sector will need to act as markets for domestically produced industrial goods. If the sector is to meet these demands and government objectives it is estimated that a real growth rate in the agricultural sector of over 5 percent annually will be required. For the smallholder sector, the target will need to be at an even higher level to reflect increasing productivity as additional services are provided and an expansion in the area to be cultivated by smallholders (The GOZ aims to achieve such levels). While these targets are high, given the human and natural resource base and government commitment, they are attainable.

### C. Resource Base

Zimbabwe has a total land area of about 39,075,900 hectares falling into 5 agro-ecological regions or zones (these roughly correspond to land use classes). Based primarily on adequacy and efficiency of rainfall, about 65 percent of the land falls into Zones

IV and V which in the absence of irrigation, are suited to livestock production only. The remainder is suitable for crop production although Zone III lands (18 percent of the total) are subject to mid-season dry spells. Average annual rainfall varies from some 16 inches in the southern part of the country (a Zone V area) to over 78 inches in the Eastern Highlands (Zone I) with a mean for the entire country of 26 inches. Only 5 percent of the land area receives over 35 inches of rainfall annually but an additional 64 percent receives over 24 inches. Variability in rainfall between areas is high, ranging from 20 percent in the north to over 46 percent in the south, meaning two locations with the same average rainfall might have very different agricultural potentials. Further, rainfall in certain parts of the country comes in a few, very heavy showers which reduces its usefulness. Consequently the averages can be misleading as indicators of cropping potential. Cropping in the south and west is more risky and the growing season shorter than in the north and east. The main rainy season extends from November through March.

Altitude is the main factor affecting temperature with the Zambezi valley in the north-west having the highest mean temperature of about 85°F. The lowest temperatures are found along the Eastern border where the average mean temperature is about 60°F. In the remainder of the country, temperature means vary between 64°F and 70°F. The coldest months of the year are June and July with localized frosts. The warmest month is October prior to the onset of the rains.

The soils of Zimbabwe are predominantly sandy with scattered areas of loam and clay. Nearly all the soils require careful management to control erosion and loss of fertility. Nevertheless, it appears water, not soil, will be the most limiting natural resource for agricultural development.

In this regard, the existence of a large number of dams must be noted. Some 100 major dams and over 7,200 minor dams have been constructed to increase water availability. Together, these provide about 15-20 percent of what has been calculated as the optimum storage. The majority of the dams are multi-purpose although the agricultural sector uses about 85 percent of total water consumption (excluding Kariba). Currently, about 20 percent of the land cultivated in the commercial sub-sector is under some form of irrigation (roughly 150,000 hectares) with another 3,000 hectares irrigated in the communal lands. Considerable potential remains for additional irrigation development, both for relatively small schemes in communal and smallholder areas, and for major project along larger rivers.

#### D. Land Use

In the commercial area, a little over 12 percent of the land is being cultivated with a range from about 3.0 percent of Zone V land to 29 percent of Zone II land. Most commercial farms are between 500 and 2,000 hectares in size although many are even larger. In the smallholder areas, nearly 25 percent of the land is cultivated with unestimated 42 percent of the Zone II land and about 17 percent of the Zone V land being under crops or in fallow. Limited information suggests that the cropped area has been increasing about 3 percent annually in recent years. Average cropped area per family is about 2-3 hectares with communal grazing except in African Purchase Areas where farms average about 140 hectares. Available information suggests about 60 percent of the communal land are under very high population pressure.

Of the areas not being cropped, the majority are being used for livestock production. In addition, there are 900,000 hectares of forest land and about 4.7 million hectares in parks and wildlife reserves.

Zimbabwean farmers produce a wide variety of crops on the land under cultivation. In the smallholder areas, maize, groundnuts, beans sorghum/millet and cotton are the most important crops with significant amounts of sunflower, fruits and vegetables also being produced. The principal crops in the commercial areas are maize, tobacco, cotton, soyabeans, sugarcane and wheat. Coffee, tea, barley and deciduous fruits are also grown. In terms of sales value, tobacco is the most important cash crop for Zimbabwean farmers accounting for about 30 percent of total crop sales. Cotton is the second most important cash crop (18 percent) and maize is the third (about 15 percent).

Livestock also plays a significant role in the sector accounting for over 25 percent of the value of production. It is estimated that the national cattle herd of roughly 5 million head is divided about 40:60 between the commercial and smallholder sub-sectors. Zimbabwe is normally self-sufficient in most meat and dairy products although the artificially low consumer milk and beef prices have resulted in some shortages of dairy and beef products.

## E. Agricultural Institutions and Supporting Services

### 1. Introduction

Overall responsibility for agricultural development is divided between the Ministry of Agriculture (MinAg) and the Ministry of Lands, Resettlement and Rural Development (MLRRD). Important supporting roles are performed by the Ministry of Natural Resources and Water Development which plans and implements activities related to boreholes and irrigation and the Ministry of Public Works which is responsible for design and construction of all government facilities.

The MinAg provides all extension services to the sector through the Department of Agricultural Technical and Extension Services (AGRITEX) as well as handling agricultural research, agricultural certificate and diploma training and veterinary services. In addition, the Ministry oversees a number of statutory bodies in the areas of marketing, credit and research.

The MLRRD has responsibility for a range of rural development activities including irrigation planning, land resettlement and cooperative development. The operations of the Agricultural and Rural Development Authority (see below) also fall under the Ministry.

Historically, there have been a series of actions, particularly since 1965, to create, adapt and consolidate agricultural institutions. These actions included:

- (a) the establishment of the Agricultural Marketing Authority (AMA) in 1967 to act as a parent body providing services and finance for all previously created state marketing agencies including (1) the Grain Marketing Board handling the major grains, oilseeds, and coffee; (2) the Cotton Marketing Board; (3) the Cold Storage Commission (cattle and sheep), and (4) the Dairy Marketing Board;
- (b) the setting up of the Tobacco Marketing Board which operates outside the AMA;
- (c) the creation of the Sabi-Limpopo Authority (1970) to develop the potential of the south-eastern Lowveld;
- (d) the establishment of Agricultural Finance Corporation (AFC) (1971) which served to consolidate several pre-existing agencies providing credit to large scale commercial farmers, and which now also serves small farmers;
- (e) the creation of Agricultural Development Authority (ADA) (1971) charged with developing the national agricultural potential;
- (f) the setting up of the Tribal Trust Land Development Corporation (TILCOR) (1968) to foster development in Tribal Areas;
- (g) the establishment of the Agricultural Research Council (ARC) (1971) to provide for greater cooperation in the research undertaken by various bodies in the country; and
- (h) the establishment of the Agricultural and Rural Development Authority (ARDA) in 1978 to consolidate the activities of ADA, TILCOR, SLA, and the Land Settlement Board (from the Ministry of Internal Affairs) and to coordinate rural development activities.

Very recent changes include the consolidation of all extension responsibility in the Ministry of Agriculture (the MLRRD previously handled extension in the communal areas), the transfer of cooperative development from MinAg to MLRRD and the establishment of a small farmer credit scheme in the AFC. More information on certain key organizational units of MinAg and the MLRRD and selected statutory bodies is provided under functional headings below.

## 2. Agricultural Research

1/ Although some research is conducted by the respective marketing groups, the Seed Maize Cooperative Company of Zimbabwe, the University of Zimbabwe and the Department of Veterinary Services, the Department of Research and Specialist Services (RSS) in the MinAg is the major Organization in this area and is responsible for conducting research in agricultural science, crop production, and pastoral production. The Department maintains close contact with the already mentioned Agricultural Research Council, a statutory body established by the Minister, which is responsible

1/ Sugar, swine and tobacco are handled by the marketing organizations.

2/ Veterinary and tsetse research

for the determination of research priorities and for the allocation of research funds within RSS. Professional and technical staff positions in the RSS total about 300. Organizationally, the department consists of a Research Services Division, a Crop Research Division, A Division of Livestock and Pastures and an Executive Branch. Research Services Division includes:

- (a) the Plant Protection Institute;
- (b) the Chemistry and Soil Research Institute;
- (c) a Biometrics Bureau;
- (d) the Agricultural Engineering Institute;
- (e) Seed Services; and
- (f) a Herbarium and Botanical Garden.

The Crop Research Division encompasses:

- (a) the Agronomy Institute;
- (b) the Crop Breeding Institute;
- (c) the Cotton Research Institute;
- (d) the Horticulture and Coffee Research Institute; and
- (e) the Lowveld Research Institute.

The Division of Livestock and Pastures includes research on various aspects of livestock and pasture production as well as advisory and regulatory services for the bee, poultry, sheep, pig and dairy industries. Research is carried out at three major research stations and four associated stations. The Executive Branch is responsible for in-service training, report publication and for overall administration.

### 3. Agricultural Training

Agricultural training leading to diplomas or certificates is the responsibility of the Deputy Secretary for Technical Services in the MinAg. Training is provided at four institutions. The two Agricultural Colleges at Gwebi and Chibero provide 3-year diploma level training. The Esigodini and Mlezu Agricultural Institutes provide three-year certificate courses. All institutions provide both practical and theoretical training in a wide range of agricultural areas. Women students are now being accepted. Current annual output from these institutions is 55 diplomates and 120 certificate holders. Plans are underway to substantially expand their capacity with a target of 80 diplomates and 240 certificate graduates annually.

Degree personnel are trained at the Faculty of Agriculture of the University of Zimbabwe. The Faculty, established in 1980 after being a Department in the Faculty of Science previously, includes three Departments: Crop Science, Animal Science and Land Management. There are plans to add a Faculty of Veterinary Medicine. The output level to date is about 15 graduates per year. Current intake is 50 students per year with plans to increase intake to 80-90 by 1985. Plans also exist to

add a fourth, practical year to the current 3-year program.

#### 4. Extension

As indicated, the principal agricultural extension organization is Agritex. The main objectives of Agritex are to:

- (i) To implement the policy of Government in relation to the development of the agricultural industry of the country, taking into consideration rural development to create the necessary infrastructure essential for successful, productive and stable agriculture.
- (ii) To increase the productivity of agriculture with special emphasis to the communal, resettlement and small-scale farmer areas through the media of agricultural extension.
- (iii) To stimulate the adoption of appropriate, proven agricultural, conservation and management practices leading to increased and profitable production on a sustained basis.
- (iv) To promote the development of the people on the land thus improving the standard of living and the quality of life of the rural people.
- (v) To provide such necessary services to the commercial farmer in order to maintain and where possible increase productivity.

Agritex is headed by a Director and has a staff of over 1,600 men and women trained in various technical aspects of agriculture. The Director of Agritex is assisted by two Assistant Directors, one for the Division of Field Services and one for the Division of Technical Services. The Field Service operates in all eight provinces under a Provincial Agricultural Officer. Separate divisions for commercial and communal extension efforts are maintained below the Provincial Office. These divisions are staffed by group Conservation and Extension Officers, Extension Officers, Conservation Officers, Extension Supervisors, Extension Assistants and Conservation Assistants. Field Services are supported by subject-matter specialists from the Technical Services Division. Branches within this Division comprise Animal Production, Engineering, Irrigation, Planning and Training with subject-matter specialists from these Branches appointed as may be required.

#### 5. Marketing

The conduct of agricultural marketing in Zimbabwe falls into controlled and uncontrolled areas. Marketing of controlled crops at fixed prices (maize, groundnuts, dairy products, beef, cotton, soya-beans, coffee, wheat and sorghum) is through the already identified statutory marketing organizations. Cattle and sheep marketing is undertaken by the Cold Storage Commission which establishes a minimum price. These bodies own and operate marketing infrastructure such as buying points, storage facilities, transportation equipment and processing plants. All production of controlled products from the large scale commercial areas must, by law, be marketed through the appropriate marketing board. In all other areas of the country there are no area

marketing controls but once production moves into the large scale commercial areas it becomes a controlled product and must be sold to the board concerned with the product unless the product is not for sale.

The statutory marketing boards, except the tobacco Board, are regulated by the Agricultural Marketing Authority. This organization also arranges short-term finance required by the Boards in the Marketing process.

Non-controlled crops such as tobacco, poultry, vegetable, fruits, beans, sunflowers and pigs are handled by the private sector at competitively determined prices. Cooperatives are important in the marketing of some of these products but in other instances, private firms or auction markets are the primary channels.

For the smallholder, up to four marketing channels are available: (1) direct to the marketing board plants or depots; (2) through a system of "approved buyers" in smallholder areas (operated by the GMB only) <sup>1/</sup> (3) via cooperatives, the majority of which were initially established for marketing, and (4) through private dealers who buy and sell on their own account. In spite of alternatives, it is generally agreed that marketing services for smallholders have been inadequate although it must be recognized that providing this service for the limited marketed amounts is and could be very costly.

#### 6. Credit

The major institutional sources of credit are commercial banks and the Agricultural Finance Cooperation. For smallholders, the only official source of credit is the AFC. The AFC is headquartered in Salisbury with two branch offices and 14 district officers. During 1980/81, the AFC made loans totalling \$132.7 million, nearly 92 percent of which went to the commercial sub-sector. Eighty percent of the loans were short-term. The AFC's share of all short-term loans to agriculture amounts to a little over 41 percent.

The Small Farmer Credit Scheme has a staff of about 260 assigned to four area (Provincial) and 13 offices. Credit to smallholders is generally provided in kind on a package basis utilizing the cooperative system for the input supply. The credit is currently supplied for controlled crops on an individual farmer basis. Credit is provided only for certain crops in certain areas. For the individual crops, packages and inputs suitable for half a hectare are utilized. A package will contain items such as fertilizer and chemicals and equipment if necessary. The target is to develop group lending. Security is provided through stop orders in the marketing system. Current interest rates are 12 percent for short-term (seasonal) loans and medium term loans. Nearly all smallholder loans are short-term. In 1979/80, about 4,500 smallholders received a little over \$2 million in credit. In 1980/81, the corresponding figures were 21,900 and \$11 million. Targets for 1981/82 are 37,000 borrowers and \$20.7 million in loans.

<sup>1/</sup> The CSC also acts as a residual buyer at cattle auctions. This is a form of "buying point".

## 7. Cooperatives

The cooperative movement in Zimbabwe has been developed in two channels. The commercial subsector is organized into a relatively small number of large, well-managed and powerful, principally supply, cooperatives. These cooperatives are represented by an apex organization the Commercial Farmers' Union (CFU) which acts as the voice of the commercial sector in dealing with the GOZ.

The smallholder subsector cooperative movement is made of of a Central Association (the Zimbabwe National Farmers' Union: ZNFU) 12 cooperative unions and 331 cooperative societies (58 of the societies operate in the smallholder commercial areas). Of this registered number not all are now active, some stopped operating during the war and have not yet been reactivated. These organizations are wholly owned by the estimated 45,000 members. Membership comes from both purchase land and communal area farmers with about 50 percent of the farmers in the purchase areas and about 6 percent of the farmers in the communal areas being served. Turnover for 1980 was \$20.5 million compared to \$4.8 million in 1979. While the majority of the turnover was in the supply of agricultural inputs, the marketing of produce accounted for \$4.9 million. The GOZ supports the development of the cooperative movement by providing a cooperative extension service (the Marketing and Cooperative Services Section) in the Ministry of Lands, Resettlement and Rural Development. The Section is headed by a Director and Deputy Directors with two Assistant Directors for Development and Technical. There are 10 Provincial Marketing Cooperative Services Officers with two posted in Salisbury and eight in the provinces. The officers are assisted by Marketing and Cooperative Services Officers (16), Marketing and Cooperative Services Extension Officers (26), Senior Assistants (28), Assistants (89) and Miscellaneous staff (34).

The GOZ has announced plans to encourage further development of cooperatives for supply and marketing purposes. A total of 37 Central Depots and 390 Distribution/Collection Centers at a cost of \$6 million are planned. It is also expected that a single apex organization combining the ZNFU and the CFU will soon be established.

NATIONAL AGRICULTURAL POLICY ENVIRONMENTI. Introduction

In Zimbabwe, as is true in all countries to some degree, overall development and political-economic objectives are reflected in policies which affect and are affected by agriculture as a producing and consuming sector. The GOZ objective of establishing a democratic and egalitarian state and society influences how agriculture is organized and will be in the future. Similarly, the development of agriculture is affected by the central development objective of growth with equity and the types of resources directed toward achieving the target. But the effects on the sector of specific or general objectives vary as does the impact on different groups making up the sector. Consequently, while generalizations on the policy environment are useful, there is also a need for some disaggregation, both between policies and between the effects of specific policies on different groups in the sector.

In the following discussion, the above reality is recognized. First, some characteristics of the general policy environment will be briefly described along with the apparent implications for the commercial and smallholder groups. This is followed by a closer examination of certain specific policies which may impact differently on different groups. A final, short section suggests issues and concerns for the future.

II. General Policies affecting Agriculture

In its planning for development, the Government has emphasized rural Zimbabwe as the most neglected area and the home and source of livelihood for the majority of the population. This has been reflected in an emphasis on increasing services in rural areas and on raising agricultural production. To back up these emphases, the GOZ has pledged strong political, institutional and financial support for rural development activities. For agriculture, this would appear to bode well. Nevertheless, there are a number of questions and issues.

First, there is the ability of the Government to finance the range of programs being planned and implemented. Government expenditures are rising more rapidly than revenues with a deficit of \$800-\$900 million, or about 30 percent of total expenditures, projected for 1981/82. Increasing revenues may be difficult without raising already high taxes on productive sectors such as agriculture which could serve to discourage additional investment and production. If the deficit is not reduced, the likely inflationary pressures from the expenditures may also affect agriculture as uncontrolled production costs probably rise faster than controlled output prices.

Reducing government expenditure is the alternative method of addressing the problem. Education is the largest single item

in the budget followed by national security, transport, health, reconstruction, local government and housing and home affairs. The Agricultural and Rural Development Ministries account for 7.0 percent of the budget. The question is whether agriculture can expect to maintain or increase its budgetary allocation given the competing demands. It will certainly be difficult to reduce spending on long overdue health and education services. Similarly, transport and local government must have some priority. Nevertheless, the comparatively low base of agricultural sector expenditures would suggest that some increases should be possible to fund new or expanded agricultural development programs.

A second issue is the availability of foreign exchange. The agricultural sector depends on a number of imports in the production process, (petrol, fertilizer raw materials, machinery, etc). Currently, foreign exchange is very limited with Zimbabwe having foreign exchange reserves of about U.S.\$213 million. The current account deficit in 1981 is expected to be Z\$591 million, more than double the 1980 level of U.S.\$260 million, before starting to decline to Z\$420 million in 1982. While net capital inflows will off-set part of the deficit, a further reduction of reserves is still forecast for 1982. Zimbabwe does have only a modest level of external debt. It amounted to about 16 percent of GDP in 1981. Therefore, a capacity for additional external borrowing exists. But the GOZ prefers to limit its external borrowing to activities which are expected to generate sufficient productive capacity in the relatively short-term to off-set the cost of borrowing.

The short-term result of the unavailability of foreign exchange and relatively conservative borrowing policy is a reduction in foreign exchange allocations including allocations for agricultural equipment. Over the long-run, if the reduced levels are maintained, there will necessarily be an impact as equipment items wear out and cannot be replaced.<sup>1/</sup>

It has been suggested that perhaps a devaluation of the Zimbabwean dollar would be justified to help correct the imbalance. While such a move should have the effect indicated, it is argued that the basic cause of the imbalance is transport to move available exports out, not the inability of Zimbabwe to sell its products abroad. The stockpile of goods awaiting export and the existing system of import controls provide the basis for dramatic improvements in foreign exchange availability once the transport bottleneck is broken. Efforts to alleviate the situation are well underway with nearly complete resolution expected within the next year. The world recession as it affects prices of Zimbabwean exports will, nevertheless, also have a major impact.

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<sup>1/</sup> As a sector, Agriculture is a large net earner of foreign exchange which argues for some priority in foreign exchange allocation to avoid a reduction in foreign exchange earning crops.

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A final general issue is the interaction between labor costs, employment and production. Agriculture in Zimbabwe is labor intensive. The Government is committed to a policy of higher, minimum wage levels and better amenities for agricultural workers. Each increase in wages or other required amenities raises costs of production on the commercial farms causing farmers to examine their labor requirements. At some point, the production of certain labor intensive crops such as tobacco or cotton will begin to fall as farmers decide to utilize fewer laborers. For efficient and moderately efficient farmers, current labor costs may not cause much reduction in labor use but employment can be expected to contract sharply as fewer workers are expected to work harder. At some stage, however, the Government will have to weigh the tradeoff between higher wages and amenities for a few and more needed employment.

A review of these general issues suggests that both commercial producers and smallholders are likely to be affected, although to different degrees. If the budget deficit is reduced through reductions in expenditures, the effects on different groups will vary depending on which programs are reduced. The likely strategy would be to continue present programs with only modest additions meaning those not currently served will continue to be excluded, i.e. smallholders would be affected to a larger extent.

If Government seeks to balance the budget through greater taxation the commercial sector will probably be most seriously affected with certain trickle-down effects on smallholders.

Foreign exchange availability will have the greatest effect on those producers using imported inputs, e.g. commercial sector. Nevertheless, a continued shortage, meaning minimal increases in fertilizer or pesticide availability, could also frustrate smallholders' attempts to utilize improved technology. This would probably be the situation unless the GOZ took steps to ensure that new customers were given equal priority with traditional customers for such inputs.

Similarly, it would appear that increases in minimum wages or labor amenities would have the largest effect on commercial producers. Effects on smallholders using family labor would be minimal.

### III. Specific Policy Issues

#### A. Agricultural Pricing and Subsidies

Producer prices for controlled commodities are determined annually through a participatory process. Using costs of production estimates, including a return on investment, the Commercial Farmers' Union and, to a lesser extent, the Zimbabwe National Farmers' Union, initially discuss possible prices with the Agricultural Marketing Authority. All three subsequently put their view to the Ministry of Agriculture. Once these discussions are completed, the Ministry of Agriculture recommends prices to an inter-ministerial committee for review. This same committee reviews consumer price recommenda-

tions of the Ministry of Trade and Commerce, which are based on commodity and processing costs and desires to keep food cost increases to the lowest feasible level. The negotiated prices are reviewed by the Ministry of Finance, Economic Planning and Development and approved by the cabinet.

Government subsidies can enter at two points. On the producer side, the price paid to the statutory board has generally been above prices paid to producers but insufficient to cover handling costs. On the consumer side, the maximum retail prices for consumers may be less than the cost of the commodity plus processing.

The costs of these subsidies amounted to an estimated \$93.9 million in 1980/81 and are budgeted at over \$170 million in 1981/82. This growing deficit stems largely from the substantial increases in the producer prices for maize with little or no increase in consumer prices. The 1982 budget estimates suggest the subsidy cost for maize alone could approach \$100 million with beef, dairy products, wheat flour and edible oils subsidies making up the remainder.

The rationale for the subsidies stems from government desire to provide producer incentives while keeping the prices on certain staple foods at levels which can be afforded by lower-income groups. The questions then are whether the established producer prices are reasonable and provide production incentives, to whom, and whether the subsidized consumer prices impact on the target groups.

On the production side, the bumper maize crop of 1980/81 provides fairly good evidence that farmers, both large and small, do respond to an incentive price and that the established price, which was raised dramatically over the 1979/80 price, does provide an incentive. Similarly, wheat production appears to be at a modestly higher level in 1981 following the announcement of higher prices for additional amounts produced. For meat and dairy products, producer prices have also been raised but the time required for a production response is longer. It is reported that the herd size is again growing reflecting the producer's perceptions that the current prices or those anticipated in the future will provide reasonable returns. Plantings of soyabeans are also reportedly up in response to higher oilseed prices. The prices themselves, which, as indicated, are set on an annual basis, do not correspond precisely to free market, border prices but they are roughly parallel except for beef which is still lower than world prices. All in all, the indications are that producers are quite price responsive and that domestic prices are reasonable in world market terms. Given the continued availability of inputs, which go primarily to the market-oriented commercial sector, producers are likely to continue to be responsive. Also, because the GOZ recognizes the importance of prices in stimulating production, much of which goes for export, the price setting system will undoubtedly continue to be used to provide production incentives.

Nevertheless, since the benefits of incentive prices accrue in direct proportion to marketings, larger producers do benefit more from the system than smaller producers who market much less. This runs somewhat counter to the GOZ's expressed objective of equalizing returns in agriculture. Over the longer-run, perhaps a form of two-tier pricing system that would provide greater production incentives for small farmers might be examined.

Finally, not all crops important to smallholders are covered by the system. This seemingly discriminates against smallholders by not guaranteeing them a market for their production. However, any examination of a possible expansion in the coverage needs to carefully consider the costs and benefits. If there is little market for any surplus produced, such as may be the case for certain food crops, or if little enters market channels, an expansion may not make financial or economic sense. Similarly, if current marketing systems provide needed services and adequate prices there may be no requirement for parastatal intervention.

Turning to the consumer side, the demand for subsidized foods is growing rapidly as urban wages increase, as prices of substitute products rise and as low prices encourage wastage. The resulting subsidies are a significant and growing burden on the financial resources of the nation amounting to 75 percent of the budgets of the Ministry of Agriculture and the Ministry of Trade and Commerce and over 8 percent of total government expenditures. If the subsidies were reaching just the poor, this might be justified on welfare grounds. However, the major beneficiaries are the urban dwellers who include most of the higher income groups. Clearly, there are poor urban dwellers who do benefit but the majority of the poor are found in the rural areas. In these areas, much of the food is home produced. These people have little access to processed dairy or wheat products and may consume their own maize.

The GOZ has recognized the problem and announced that the subsidies will be withdrawn over a three-year period in concert with increases in minimum wages. This is consistent with the recommendations of the Riddell Commission on Incomes, Prices and Conditions of Service. So far, nevertheless, concrete plans in this direction have not been announced.

#### B. Emphasis On and Within the Sector

The manpower and financial constraints facing the Government of Zimbabwe force decisions on the relative resource levels to be provided to various ministries and then to programs within the ministries. Where shall the resources go?

Budgetary allocations as an indicator of the policy environment would suggest only a modest priority for agriculture. As noted previously in this Annex, the total government allocation to the Ministries of Agriculture and Lands, Resettlement and Rural Development amount to only 7 percent of the 1981-82 recurrent budget. In percentage terms, this is up slightly from budgeted

amounts for 1980-81 but still at a relatively low level.

However, probably a more meaningful indicator would be the allocation of proposed investment. Unfortunately, the Three-Year Transitional Development Plan is still not available for use in answering this question. Based on the ZIMCORD data, which is reportedly still fairly accurate, it does appear that agriculture/rural development is of a fairly high priority. From a total capital funding requirement of Z\$3.74 billion (U.S.\$5.25 billion) over the 1982/82-1984/85 period, about 25 percent is programmed for agriculture/rural development. For agriculture alone over 14 percent is allocated including an investment of some Z\$126.9 million (U.S.\$177.7 million) for commercial agriculture. In addition, other investments such as those for rural roads and transport impact on agriculture. This is evidence of a meaningful investment policy commitment to agriculture in an economy where, as pointed out elsewhere, agriculture is not the largest sector. It would seem that the situation found in many developing countries where agriculture does not receive a fair allocation of investment funds is not present in Zimbabwe. Nevertheless, final judgment on the GOZ investment policy as it relates to agriculture will need to await publication of the Plan.

Within agriculture/rural development, the resource allocation process necessarily must confront two important policy choices. First, the emphasis to be placed on commercial versus smallholder agriculture must be determined. Second, within the smallholder sub-sector, determinations need to be made of the priority on existing smallholder areas versus dryland resettlement versus irrigation development.

Looking at the commercial versus smallholder decision, it is apparent that the GOZ faces what are perhaps conflicting objectives. On the one hand, it is recognized that the commercial sub-sector of 4-5,000 farmers produces the majority of agricultural output (70 percent) and in the neighborhood of 90 percent of marketed production. The commercial sub-sector is also a major employer and the source of 30-40 percent of exports. Maintaining the output of this sub-sector is highly important to the overall economy. In the interests of equity and to better utilize available resources, it is vital that these farmers be provided the wherewithall to raise production and productivity levels. Doing this will necessitate greater attention and resources than were provided in the past.

Turning to the emphasis within the smallholder sub-sector, a central feature of the GOZ's policy of economic growth with equity is the fair distribution of land. Land distribution has been viewed as a key political issue with important economic implications. Resettlement of some number of families is consequently a political imperative. But it is obvious that resettlement of even up to 162,000 families from a current smallholder population of 700-800,000 families will only marginally affect over-crowding or the living standards of the majority of the poor rural population. Nor will the program do much to provide employment for a rapidly growing labor force. The costs of Z\$3,500-\$4,000 per family

settled also are significant.

For small-scale irrigation development, the above also holds true. The number of families that could be settled is relatively small while the cost per family is likely to be higher than for dryland areas. Certainly, the expected productivity should be higher, but whether it will be sufficiently high to provide an adequate return on the additional costs is uncertain.

In the above situation, what is the government policy? On the smallholders versus commercial areas, it is clear that the favored status of commercial agriculture vis-a-vis government support services is going to be reduced, more emphasis is being placed on the problems and needs of the smallholders. The commercial sub-sector is consequently being expected to bear additional costs. But the government is not abandoning the commercial sub-sector. It is simply not going to be allocated first priority in all instances when resources and support are insufficient for everyone.

Within the smallholder sub-sector, it is apparent that the existing smallholder areas will need to support and provide employment for the majority of new rural labor force entrants. To do so at more than a minimal level will require investments of various kinds including roads, input supply and marketing facilities, extension programs and development of technological packages suitable for smallholders in these generally lower potential areas.

But does the government budget reflect the realities of the above and the implied emphases to be followed? An examination of the estimates of expenditure for the year ending June 30, 1982 provides some indications but no clear-cut evidence. In total, the budgets of the Ministry of Agriculture and the Ministry of Lands, Resettlement and Rural Development amount to Z\$140.7 million. Of this total, Z\$42.3 million covers subsidies on food products and Z\$8.8 million is for production loans. A further Z\$24.6 million is allocated for estate development grants some of which could be for labor intensive irrigation development. Within the remaining Z\$65.0 million, Z\$4.9 million is for Tsetse and Trypanosomiasis control, Z\$1.8 million for the surveyor general and Z\$14.3 million for veterinary services. Resettlement is specifically allocated about about Z\$14.5 million with research and training budgeted at Z\$8.7 million and agricultural extension at Z\$15.2 million. Marketing and Cooperative Services receive Z\$1.3 million while miscellaneous accounts make up the remainder (Z\$4.3 million).

From this budget, it would appear that the smallholder sub-sector is receiving resources in line with current output levels but is not favorably treated vis-a-vis either commercial farmers or resettlement settlers. These conclusions are based on the following assumptions:

- (a) One-half of the Tsetse and Trypanosomiasis Control Budget and one-half of the Veterinary Budget can be allocated to

- smallholders (Z\$10.0 million) with the remainder directed at commercial agriculture;
- (b) Only one-third of the Research and Specialist Services Budget is attributable to smallholders (Z\$2.9 million) with the remainder primarily benefitting commercial agriculture (Z\$5.8 million);
  - (c) Of Agricultural Extension Funds, no more than two-thirds primarily benefits smallholders (Z\$10.2 million) with at least 10 percent of that directed at resettlement schemes (Z\$1.0 million), the remainder supports the commercial sub-sector (Z\$5.0 million);
  - (d) All funding for the Marketing and Cooperative Services Section benefits smallholders (\$1.3 million);
  - (e) One-half of the general category benefits smallholders (\$14.5 million); and
  - (f) All resettlement funds benefit settlers (\$14.5 million) with 20 percent of the general category also primarily benefitting settlers (\$0.9 million).

On this basis, the 700-800,000 families in the smallholder sector receive agricultural support valued at Z\$25.7 million. In comparison, the 10-20,000 settler families receive support valued at Z\$16.4 million and the commercial sub-sector support worth Z\$23.1 million. <sup>1/</sup> Small irrigation development is only directly allocated Z\$0.8 million to which should be added maintenance and extension costs, say another Z\$0.5 million. Thus the 4,500 families receive some Z\$1.3 million in services.

The above analysis is acknowledged to be crude, but it clearly demonstrates, even if the numbers are wrong by a significant factor, that commercial and resettlement farmers are currently receiving relatively high shares of available resources. Economic necessity dictates the continual support to the commercial sub-sector and political necessity reasons indicate such allocations for resettlement are likely to continue for at least some time. But clearly, the GOZ needs to consider the cost-effectiveness, along with other factors, of land resettlement vis-a-vis other uses of investment funds. Since resettlement is expensive per family benefitting, care needs to be taken to maximize expected returns, i.e. settler selection, service provision and coordination, are critical. Simultaneously, the GOZ needs to be alert so that a special class of smallholders requiring continuing special attention and a disproportionate share of available resources is not created.

Similarly, care needs to be exercised in developing irrigation schemes. Some investment is undoubtedly warranted to increase production in certain areas, to reduce risks, to use

<sup>1/</sup> It should be noted that this group also employs nearly 300,000 farm laborers so in effect the government support directly affects a much larger number of families.

available water, etc. But the costs per beneficiary are likely to be high. Sound planning which examines costs, benefits and reasons for the investment should be conducted prior to investment.

To summarize, on equity grounds, the non-resettlement smallholder areas seem to be neglected by current policy. The low yields and degraded resource base suggest needs and a potential for improvement. Relatively greater donor emphasis on this area may be necessary to allow a balanced investment program to occur and a continued flow of support to the important commercial sub-sector.

## C. Agricultural Marketing

### 1. Introduction

As is indicated in Annex A, and elsewhere in the document, the marketing of most of the major commercial crops in Zimbabwe is the responsibility of a series of statutory corporations which operate on the basis of fixed prices. Two policy questions arise from this system. First, is it efficient? Do the established prices reflect market forces and does the system carry out the marketing function at a reasonable cost in a timely manner? Second, are necessary services provided? Do farmers receive the services needed to encourage production? If the answer to any of these questions is no, perhaps government policy in the area needs to be re-examined and adjusted.

There are multiple factors which must be examined in answering these questions including: (a) history and objectives of the system; (b) the system and its operations; and (c) system performance.

In the following, each area is briefly considered before some conclusions are drawn.

### 2. History and Objectives

Government involvement in agricultural marketing began in Zimbabwe in 1931. In that year, the deteriorating economic position, low maize prices and other local problems, led to introduction of the Maize Marketing Act and the establishment of the Grain Marketing Board. All maize from commercial producers, except that held on the farm, had to be sold to the Board which was also responsible for its disposal. In 1937, the Cold Storage Commission was established with considerable control over the beef industry. This was followed by the establishment of the Dairy Marketing Board in 1952 and the setting up in 1967 of the Agricultural Marketing Authority to coordinate the activities of the separate boards. In 1969, the Cotton Marketing Board was created, taking over responsibilities for cotton and cotton seed from the Grain Marketing Board.

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In general, the Boards and Authority were established to:

- (a) encourage production to satisfy domestic requirements; and
- (b) encourage production for export of commodities for which favorable export markets existed. Fixed producer prices have been the primary mechanism employed to achieve these objectives.

### 3. The System and Its Operation

The statutory boards provide:

- (a) a guaranteed market for produce;
- (b) economies of scale in respect to handling, storage, distribution and export costs;
- (c) relief to producers via the assumption of storage, marketing and final sale responsibility; and
- (d) grading standards understood and accepted by both producers and consumers.

Because the boards are coupled with the system of fixed producer prices, they also provide guaranteed prices. The system of a willing buyer of any quantity effectively shifts all risk after the crop is produced off the farm, i.e. storage losses and costs and market uncertainties become responsibilities of the statutory boards rather than the producers.

The price formulation process begins with discussion and review involving both producer and government representatives. From the results of these meetings and a review of the trading accounts of the various boards, recommendations on prices are forwarded to the Ministry of Agriculture by the Agricultural Marketing Authority. In addition, the Minister, producer representatives and officials from the Ministry of Agriculture meet to discuss pricing policy. Based on these meetings, and the AMA recommendations, the Minister and his staff determine prices to be recommended to government. These recommendations are examined by a working party of the Ministerial Economic Coordinating Committee (MECC). After the review, and any changes resulting therefrom, the recommendations go to the MECC which is composed of the Ministers of the Economic Ministries. The MECC considers the proposals and develops recommendations for the Cabinet where the final decision is made. Prices are then announced for the next intake year.

The prices set generally recognize the costs of production, the relative profitability of alternate crops, estimated versus desired production, stocks on hand, export possibilities, possible costs to government of maintaining a particular price level and non-economic factors (boosting producer confidence, political objectives, etc.). Because the government recognizes the importance of prices in production decisions by farmers, the prices have normally been set at incentive levels. Nevertheless, there has been no reluctance to change prices from year to year. For example, maize prices rose over 61 percent between 1970/71 and 1980/81. But prices were lowered from previous year's levels in three of those years, rose by less than 10 percent in two years and were

increased by nearly 40 percent in one year. Similar fluctuations occurred for cotton, wheat and beef.

Except for beef, which has constantly been low, the prices have also tended to reflect world levels. At the moment, wheat, cotton and soyabeans are at world levels, maize is slightly higher and beef is lower. According to costs of production figures, all provide farmers with opportunities to secure a reasonable return above costs.

To implement their buying responsibilities, the various boards operate collection/buying depots and marketing points. The Grain Marketing Board has the most extensive network with some 50 main depots, and over 270 licensed buyers covering other areas. Some cooperatives also serve as buying agents. The Cotton Marketing Board operates nine depots and gins, the Dairy Marketing Board accepts milk at five processing plants and the Cold Storage Commission utilizes both buying points and acts as residual buyer at organized sales in smallholder areas.

#### 4. Performance

Current operating budgets of the involved boards approach \$600 million annually. In 1980/81, the GMB handled about 815,000 metric tons of maize although deliveries for 1981/82 will be about 2,000,000 metric tons. In 1980/81, the GMB also purchased some 163,000 metric tons of wheat, 65,000 metric tons of soyabeans and smaller quantities of sorghum, coffee and groundnuts. The Cotton Marketing Board purchased about 177,000 metric tons of cotton in 1980/81 while the CSC slaughtered over 450,000 head of cattle with a cold dressed mass of over 95,000 metric tons. The DMB processed over 155 million kilograms of milk in 1980.

As the numbers indicate, the Boards are big business handling large volumes of produce. Only for cotton and coffee are the majority of purchases ultimately re-exported. However, sizeable quantities of maize and beef also enter the export market in normal years. Using the GMB as an example, administrative costs amount to less than 15 percent of sales and less than 10 percent if interest costs are excluded. Storage losses are less than 1 percent. Staff, excluding laborers, total about 300. Private transportation contractors are used to a considerable extent to avoid the necessity of a huge transport fleet. Combined, these facts suggest an efficient operation, one that is duplicated by the other boards such as the CMB where excellent quality control allows a premium to be obtained for Zimbabwean cotton on the world market.

#### 5. Conclusions

The system has contributed to orderliness in marketing, greater stability in prices for both producers and consumers, allowed self-sufficiency in food production to be achieved and maintained and provided incentives to producers. The Boards have not been used to favor consumers at the expense of producers.

Nor have the Boards been used by government to tax the producer on production for export. The Boards have managed to provide adequate permanent or temporary storage for the quantities of produce offered. There is no evidence that storage or processing losses are excessive. The system appears efficient with scrutiny of operations provided by both producers and government. Audits by commercial audit firms prevent questionable bookkeeping practices. It is very unlikely that the private sector would be willing to invest in the necessary infrastructure to take over the marketing operation. It is even less likely that the government would be willing to relinquish control.

The system of Marketing Boards does not serve all segments of the producing groups equally well. The smallholder sub-sector markets less and it has been less well provided with opportunities to market. One reason is that the fixed price system does not allow adequate margins to cover the costs of low volume facilities. Nevertheless, programs to expand coverage and to make available additional market outlets are underway.

To answer the questions initially proposed. Yes, the system is based on supply/demand considerations with a view toward international markets. The system does provide excellent service to the commercial producers and fair services to smallholders. The system has considerable flexibility as evidenced by GMB ability to handle more than a 100 percent change in maize marketing from one year to the next. The prices are adjusted to provide production incentives and while the system is not optimal in smallholder areas adjustments are being made to improve operation in these areas. The use of private cooperatives as the bottom link in the marketing chain seems to be the currently preferred method. All in all, the policy directions being followed in the agricultural marketing area seem correct and suitable to encourage additional agricultural production from all production sub-sector.

#### D. Input Supply

Input supply policy in Zimbabwe has been based on a close working relationship between government and the private sector. For fertilizer, other chemicals and farm equipment, target requirements for each year are jointly developed by a government/private sector/producer committees. On this basis, government allocates necessary foreign exchange for the import of needed raw materials. Production and sale of the inputs is the responsibility of the private sector. Fertilizers are sold at fixed prices which cover the costs of production and allow a return on investment. Competition keeps down the cost of other imported and domestically produced items.

For the supply of imported seed, the government/private sector relationship is even closer. The varieties have been developed on government stations. They are then provided to private companies on an exclusive basis. The receiving company in turn agrees to multiply the seed so sufficient quantities to meet market demand are available and to sell at agreed upon prices.

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The system has worked very well in making seeds and fertilizer available to the commercial sub-sector. It has worked a little less well in reaching smallholders. For fertilizer, the problem has been that all fertilizer is sold at the factory gate. The companies do not operate distribution systems nor sales outlets. Except as provided by cooperatives, there has been no organized system to make fertilizers accessible to smallholders although small traders may have encouraged quantities at higher prices. The fertilizer companies have encouraged communal farmers to pool their money via savings clubs so bulk orders from the factory could be placed but this has only marginal impact. It has also been suggested that fertilizer grades are not tailored to the needs of the drier, communal areas. In spite of the difficulties, it is estimated that 20 percent of fertilizer sold is to smallholders.

The distribution of improved seed has been less a problem since the quantities are small and it can be handled in small lots. To improve marketability, maize seed is available in packages of 500 grams ranging up to 50 kilogram sacks. Seeds are handled by regular agricultural suppliers as well as store-keepers everywhere. The Zimbabwe Seed Maize Cooperative company reports that over 50 percent of improved maize seed sales are to the smallholder sector.

For credit, it is only recently that significant quantities have become available to smallholders. For the commercial sector, both banks and the Agricultural Finance Corporation have been major suppliers. Lending rates have always been close to commercial levels because the AFC raises some of its money on the commercial market and has been expected to operate at a breakeven level.

Basically, only two criticisms can be levelled against the input supply system and policy. First, it has been operated largely for the benefit of commercial producers. Consequently, smallholders access was somewhat restricted. However, it should be noted that since the system was basically operated by the private sector on a full cost charged and profit basis, there was a reason the inputs were not available everywhere - low volume with little profit opportunity, or in the case of credit, small loans with administrative costs that could not be covered by the interest rates.

Second, the system has resulted in a high cost for certain inputs, primarily fertilizers where certain local products are highly priced by world standards. Part of the problem stems from the use of low analysis products and from a policy of raising the price of imported products to the level of local production to protect local industry. There is no easy solution to this added cost given the limited market size and the need for huge investments if new more efficient fertilizer facilities were to be developed. The higher cost of some fertilizer leading to higher production costs, nevertheless, does place the Zimbabwean producer in a less competitive position when his crops must enter the world market.

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To conclude, past input supply policies have been effective and have favoured commercial producers. An expansion of opportunities for smallholders to secure needed inputs is now underway via the cooperative system in particular. Credit is also becoming increasingly available as the AFC expands its small farmer credit scheme. The system has been operated on a full cost assumed basis with no subsidies except indirectly as input producers are protected against cheaper imports. The system may have favoured mechanized production to a limited degree as scarce foreign exchange was allocated for machinery imports but machinery was not directly subsidized, although the price mechanism was used to make certain investments profitable and to stimulate production of crops which were and are produced under mechanized conditions. The partnership of government and the private sector in this area has worked well. If in the future input policies remain largely as they are, coupled with an expansion in accessibility, a good basis exists to expect the continued operation of an effective system enabling and supporting production increases.

#### VI. A Look Ahead

The future policy environment looks very encouraging assuming the GOZ continues with current policies, except those where changes have already been started or promised, such as on consumer subsidies and input accessibility. The greatest danger to this optimism would appear to stem from a possible inability of the GOZ to solve larger economy-wide problems with a resultant effect on the agricultural sector policy environment. Some examples! (a) continued shortages of foreign exchange leading to further cuts in machinery imports leading to an accelerating decline in the condition of the machinery pool; (b) rapid increases in the prices of inputs such as fertilizer or labor due to foreign exchange or minimum wage policies without corresponding rises in output prices; (c) a need to maintain producer prices at static levels, to effectively reduce production incentives, because subsidy levels are a serious budget drain and there is a reluctance to raise consumer food prices; (d) a static level of resources directed toward agriculture because of budget constraints or other priorities with a rapidly increasing proportion of the allocation going to smallholders and a real decline in service to the market-oriented commercial producers; (e) government wage and promotion policies which lead to continued losses of experienced sector personnel; and (f) widely expanded land settlement programs with limited efforts to control squatting.

It should be made clear, nevertheless, that there is no current evidence that any of the above will necessarily occur. In fact, as long as the full implications of the alternative policies can be elaborated to decision-makers, there is good reason to be optimistic they will not occur. The GOZ is very pragmatic and seems committed to maintaining a strong agricultural base. What is necessary, however, is a capacity for government to evaluate these likely consequences of alternative policy courses. Certainly some capacity to do this now exists but a greater capacity will probably be necessary to ensure that decisions are made with a full understanding of probable outcomes rather than only some ideas and estimates.

## I. Introduction

One of the more critical issues facing the Government of Zimbabwe is who shall have access to land and on what terms. At the Lancaster House conference, agreement on a program of resettling landless and unemployed Africans on underutilized commercial land to help correct historic imbalances in access to productive assets and to help meet land hunger was a key to the resolution of broader issues. Nevertheless, the implementation of this program remains fraught with questions including relative emphasis, the pace of resettlement, resettlement models, expectations for the program and various other features which impact on and are impacted by other agricultural development efforts.

In this paper the historical background to resettlement, the need for land distribution will be briefly described. This will be followed by a discussion of GOZ objectives for the land settlement program and a description of the settlement models and implementation strategy being utilized. Progress to date will then be examined along with current implementation issues and constraints to achievement of objectives. A final section will discuss possible avenues of U.S. support.

## II. Historical Background and Setting

Land use and development in Zimbabwe has historically been the product of interaction between government policies on the one hand, and initiatives by farmers in European and African communities as well as responses to these policies on the other. To a considerable extent land use policies have been paternal and have been linked to the perpetuation of racial inequality.

Historically, policies in Zimbabwe have focused on two objectives: (1) redistributing land between Europeans and Africans, and (2) improving the use of land in one or more areas. However, the two categories of policy have not been entirely distinct from one other, since adding to the size of lands apportioned to Africans has been one of the strategies for dealing with agro-economic problems resulting from high person-land ratios.

The first policies, in the 1890's and around the turn of the century, established reserves for the Shona and Ndebele. The 1923 Constitution, under which the country attained internal self-government from Britain, enshrined reserves as permanent fixtures, enlarged considerably from what they had been in 1890. (See Table 1).

<sup>1/</sup> Draws heavily on Intensive Resettlement Policies and Procedures, Ministry of Lands, Resettlement and Rural Development, Government of Zimbabwe and "Land and Rural Development in Independent Zimbabwe", by John Harbeson, USAID.

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Table I  
Historical Summary of Land Distribution in  
Zimbabwe

<u>Year</u>	<u>White Controlled</u>	<u>Black Controlled</u>	<u>Non-Racial Other</u>	
1894	15.0%	2.2%	82.8%	
1910	23.4%	26.0%	50.6%	
1923	32.8%	22.0%	45.2%	
1931	50.8%	30.1%	18.5%	0.6%
1961	53.2%	43.5%		3.3%
1969	46.6%	46.6%		6.8%
1977		42.0%	51.2%	6.8%

The 1930 Land Apportionment Act was a milestone in the evolution of the country's land policy. Further enlarging both the European and African farming zones, the Act specifically barred the purchases of land by Europeans and African in each other's spheres. At the same time, African Purchase Areas (APL's) were created under the Act within which African farmers could acquire freehold tenure which the European farmers enjoyed. Substantial sections of the European community vigorously opposed this measure, giving voice to fears less often expressed by settlers elsewhere on the continent that African farmers would provide them unwanted agricultural competition. Defenders of the plan argued that creation of the Purchase Areas was a necessary quid pro quo for the quashing of African rights to purchase land in the European areas that never previously had been legally and officially denied. They also believe continued racial segregation of the agricultural communities was the necessary price of providing opportunities in the rural areas for upwardly mobile peasant farmers. Entry into the APLs required proof of farming skill and possession of resources. In the light of the subsequent population growth, the 3.0 millior hectares offered Africans in the APL's has increasingly appeared as only a symbolic concession to African demands for more access to land. However, given the accepted importance of European commercial farming to the country's economic well-being, the problems experienced in creating the APL's raised the question whether anything but symbolic gestures were possible in response to African claims to proprietorship of the land.

Nevertheless, one of the most striking features of rural development in Zimbabwe has been the less intensive utilization commercial farmers have made of the land they have struggled so hard to keep inviolate against African claims. Only about 20 percent of European land was under cultivation in 1976, somewhat greater proportions of APL land being cultivated. By contrast, TTL farmers have substantially overcultivated their land at the expense of some that should be left to pasture. Even making allowances for war and rotation patterns, European and APL lands have been used less intensively. <sup>1/</sup>

<sup>1/</sup> The argument for the less incensive is that this reflects optimum sustainable use. Of course this point remains debatable.

Table II

Arable Land Under Cultivation ('000 ha)

	<u>European Land</u>	<u>APL Land</u>	<u>Communal Areas</u>
Total Land Area	15769.5	1416.1	16279.4
Arable Region I(14%)	61.7	1.0	18.0
Arable Region II(45%)	1946.0	113.5	564.8
Arable Region III(27%)	875.0	114.7	760.0
Arable Region IV-V(0%)	-----	-----	-----
Total Arable Land	2882.7	259.2	1342.8
Land Under Crops	570.0	86.0	1677.0
Percent Arable Cropped	20.0	33.0	125.0

Table III

1975 Livestock Numbers and Carrying Capacity ('000 LU)

	<u>European Land</u>	<u>Communal Areas</u>
Carrying Capacity	2700	1585
Actual Numbers of Livestock Units	2000	2634

Finally it should be noted that resettlement is not a new idea in Zimbabwe. Particularly since the passage of the 1930 Land Apportionment Act, tens of thousands of Africans have been forcibly transferred to enlarged reserves from the European commercial farming zones. Squatters have continually been evicted from the commercial farms. Over 50 small scale irrigation schemes in communal areas also involved resettlement. During the liberation war it has been estimated that more than 500,000 Africans were resettled in protected villages in order to isolate the guerillas. Unfortunately previous experiences with settlement have been associated with hardship rather than opportunity. To an extent that is open to speculation in the absence of inquiry, the independent Zimbabwean government, whose resettlement intentions are very different from those of its predecessors, may have to labor to overcome unfavourable popular remembrance of previous resettlement programs.

### III. Development Objectives and the Resettlement Program

The Government of Zimbabwe has expressed a strong commitment to comprehensive and integrated rural development leading not only to growth with equity but eventually to the elimination of the distinctions between commercial and communal regions that have perpetuated racial inequality throughout the century. The Government's broad strategy is to reduce overpopulation in the communal areas by creating more off-farm employment and employment security, resettling refugees and landless persons on underutilized or abandoned portions of the commercial farming areas, and more intensive development of the communal areas themselves through extension work, irrigation projects and intensive rural development activities. This government, and its predecessors as well, have recognized that a major effort to promote family planning is the necessary concomitant of programs to provide more employment for a rapidly growing population.

The following specific goals have been cited by the Government in furtherance of these general aims:

- 1) high rates of economic growth in all sectors and especially in the rural and peasant agricultural sector;
- 2) a more equitable and efficient distribution of productive assets, especially land;
- 3) a more equitable distribution of income and income earning opportunities across racial groups;
- 4) high rates of growth of productive employment in all sectors and especially the rural sector;
- 5) provision and extension of physical and social infrastructure especially in the rural areas; and
- 6) democratic and popular participation in the development process.

Within this general strategy the Government has clearly given high priority to an effective rural development strategy centering about land tenure, use, and administration. The Government has made clear its preference for more cooperative forms of land use in the rural areas, but in advance of detailed investigations and conscious of the need to understand and foster the wishes of the people themselves, it has encouraged experimentation with a variety of land tenure models. To date it has continued to honor traditional tenure arrangements in the communal areas, issued individual permits to settlers in the intensive resettlement schemes, encouraged collective farms for youth and communal grazing on the settlement schemes and contemplated some forms of plantation agriculture through irrigation. The existing rural development projects vary from a limited focus on agricultural development to projects that include the development of "growth points" for urban and commercial concerns. While most of the projects contemplate target incomes close to the agricultural minimum wage some projects have realized or demonstrated potential for substantially higher income levels. The target populations range from proven or potential master farmers to those with no proven agricultural inclinations. While content for the present to allow a measure of decentralized and traditional land use administration in the communal lands by the chiefs, the Government clearly plans to use legal authority inherited from the preceding regime to exercise more centralized direction of rural development projects in cooperation with new local organizations such as the political party and the district councils. Such increased administration of land use by the central government points to the possibility that existing patterns of land tenure that currently resemble de facto freehold in many respects will gravitate closer to de facto tenancy at the pleasure of the elected and/or public authorities.

#### IV. Settlement Program Details

##### A. Introduction

The underlying premises of the intensive resettlement scheme

program are (1) abandoned or underutilized farms can be resettled in such a fashion as to increase the overall productivity of the commercial farming zone without disturbing profitable, predominantly European large scale farming; (2) settlement land use planning should be ecologically sound according to existing technical knowledge; (3) target family incomes should be approximately that of agricultural laborers earning the minimum wage; (4) settlers should hold land as a privilege conditional upon beneficial occupation; (5) cooperative activity should be encouraged; (6) beneficiaries of the program should be those who are landless and unemployed; (7) settlements are not to be simply communal expansion areas; and (8) farms should be purchased on a willing buyer-willing seller basis.

The specific objectives of the Intensive Resettlement Programme may be summarized as follows -

- (a) to provide some relief of the pressures on over-populated land;
- (b) to extend and improve the base for productive agriculture in the peasant farming sector;
- (c) to improve the standard of living of the largest and poorest sector of the population of Zimbabwe;
- (d) to ameliorate the plight of people who have been adversely affected by the war and to rehabilitate them;
- (e) to provide, at the lower end of the scale, opportunities for people who have no land and who are without employment and may, therefore, be classed as destitute;
- (f) to bring abandoned or under-utilized land into full production as one facet of implementing an equitable policy of land redistribution;
- (g) to achieve national stability and progress in a country that has only recently emerged from the turmoil of war.

#### B. Settlement Models

Four models for resettlement are being used:

MODEL A (intensive village settlements with individual arable allocations and communal grazing area).

- (1) All settlers are allocated a residential plot within a communal village where amenities such as borehole water supplies and vegetable gardens may be provided. The concentration of population in this manner will enable social services in the form of clinics, schools, telephones, sporting facilities and possible even electric power to be developed within the area.

- (2) Each settler is allocated about 5 hectares of arable land within, if possible, a two or three kilometre radius of the communal village.
- (3) A grazing right, tied to the arable holding, of five to twenty livestock units depending on the availability of grazing and the agro-ecological area, is being allocated to each settler. Grazing land is demarcated on a group basis and will therefore be communally utilized.
- (4) In every instance where people are allocated new land holdings, it must be on the strict condition that they relinquish any existing land right in the tribal areas.
- (5) The arable land and grazing rights are allocated initially on a permit basis.
- (6) Farmer committees are elected by the settlers to plan and coordinate all the activities of the village community other than production from the arable lands.
- (7) The communities are being encouraged to develop communal woodlots for the sustained production of firewood and building timber requirements. In areas where arable lands and available water supplies are widely dispersed or where vermin will be a problem to crop production, it will be necessary to modify the model to allow settlers to live in the vicinity of their arable lands some distance from the rural villages.

MODEL B (intensive settlement with communal living and co-operative farming).

In this model all activity is based on the community, with co-operative structures and management. It is a system which has as its objectives the development of a viable agricultural enterprise and to assist people who have very limited resources to become established in agriculture. While a destitute person will have great difficulty in obtaining resources as an individual, the co-operative nature of this model gives corporate responsibility and opportunity to the community and facilitates the provision of resources such as land, tillage, services, agricultural credit, buildings, stock and equipment.

Key Elements

- (1) Selection of members is, if possible, based on their ability to make a contribution to the enterprise, and on their strong dedication to co-operative action in a tightly knit communal society.
- (2) Members should have a high level of mutual trust, respect and the ability to put communal interests above personal interests.
- (3) Committees to be established to plan and carry out all organizational activities.

- (4) All property, land, and equipment, to be co-operatively held; housing may be co-operative or private, and livestock may be privately owned.
- (5) The community to live together on the co-operative farm and not scattered about the countryside.
- (6) The co-operative must be established as a legal entity.

Members will elect their own management committees who will take decisions based on the will and for the benefit of the community. The purchase of supplies and inputs, the management of credit and marketing of produce, all to be done co-operatively. The members of the co-operative to contribute their labor and skills to the enterprise and the profits to be shared according to a formula agreed amongst themselves.

MODEL C (intensive settlement combined with a centralized estate farm).

This model incorporates a central core estate, which will provide certain services to farmers and to which farmers will contribute labor. Arable land and livestock are individually owned, grazing is communal.

The central estate will have its own resources of arable, grazing and stock in order to generate its own income. Labour for the estate to be drawn from the settlers, with additional labour from other sources at peak periods.

- (1) Arable land, woodlots and residential land to be allocated individually.
- (2) Grazing land to be communal.
- (3) Grazing rights allocated to individual to be tied to arable allocations.
- (4) A central estate to be planned on a single unit basis (as a commercial farm) and to own all its necessary equipment.
- (5) Labour for the central estate to be contributed by the farmers, with additional labour at peak periods.
- (6) The estate to supply services to the farmers, such as mechanical draught, transport, production of tree seedlings and other services depending on circumstances.
- (7) The estate to maintain roads, water supplies and contribute to services such as education and health.
- (8) A rural service centre to be located within the estate by preference, but this will depend on water supplies.

Individual farmers will manage their own arable lands, woodlots and gardens, and will look after their own cattle, but must co-operate

in managing the communal grazing areas. The estate to be run by a manager who will also co-ordinate the contribution of labor for the estate, will manage any large scale forestry or similar enterprise, and be responsible for roads, water and other necessary services. The farmers should select a committee to assist and advise the manager, and establish supply and marketing co-operatives which can be centralized on the estate.

Individual farmers will finance their own operations, and all profits will accrue to the individual farmer. The State is to finance the estate in the early stages of establishment and development. If possible the estate should become self-supporting but if the burden of servicing roads, water supplies, schools, clinics and other non-farm items becomes too costly, assistance must be provided by the State through normal local government channels. It is envisaged that the labour contributed by farmers to the estate may be contributed equally and freely because the returns of this labor will benefit the people in the form of community services. Services provided by the estate will have to be paid for by farmers at economic rates.

Accelerated Model (individual arable allocation and communal grazing areas).

In a strict sense this is not a separate model, but only a phased method of implementing Model A. It has been developed in response to a need to accelerate the pace of resettlement and numbers of people settled within severe limits on government ability to actually carryout the full range of activities planned under the other models. The model also is designed to take advantage of the availability of scattered land parcels which are not large enough to warrant a complete development effort at this time.

The model consists of a first phase where individual arable allocations and communal grazing areas are demarked. The settlers are then allowed to occupy the land with no extra government support beyond that normally provided by extension and other services to all communal farmers. This means that basically the settlers are on their own. At a later stage the normal village and other production support services which are a part of the regular models will be provided. However, no firm timing for the provision of these services is provided.

C. Land Procurement

Criteria for selection of land includes: <sup>1/</sup>

- (1) land which is suitable for resettlement near adjacent communal areas, particularly in areas of heavy land pressure;
- (2) land not presently actively farmed which has agricultural potential;

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<sup>1/</sup> All of the criteria do not apply to the accelerated program where smaller parcels of land not necessarily adjacent to communal areas are also being procured and allocated.

- (3) blocks of land large enough to permit economic provision of services and infrastructure;
- (4) areas reasonably well served with roads and other infrastructure - at least for the initial settlements; and
- (5) areas where some planning information exists to facilitate rapid implementation.

The lands purchased are to be found in natural regions II through V, and the size of the holdings has been planned accordingly.

Table IV

Settlement Holdings by Natural Region

Natural Region	Arable Ha.	Grazing	LUs	Total Area
II	5	20	4	25
III	5	55	8	60
IV	5	75	10	80
V	5	195	20	200

The costs of settlement per hectare are roughly inverse to those of settlement per family. Approximately 85% of the land and 70% of the settlers, at least in initial programs, are to be located in natural regions 3 and 4.

The actual land purchase is the responsibility of the Government Valuations Office who negotiates the purchase price. Where land has been abandoned and has no conventional market value, the Valuation Officer consults Agritex on the value of such land as resettlement land. In this process the following factors are taken into account-

- (a) the percentage of potential arable;
- (b) availability and quality of grazing land;
- (c) the climatic/ecological zone;
- (d) land classification within the farm;
- (e) the availability of service facilities (fencing, roads, water, electricity etc.)
- (f) accessibility;
- (g) the value of existing buildings.

Purchase costs have ranged from US \$35 per hectare for the best properties in Natural Region II to under \$10 per hectare for some Natural Region V land. Costs also vary within Natural Regions depending upon the state of the property and its facilities.

#### D. Responsible Organizations

Organizations with involvement and responsibility in the program include the Ministries of: Agriculture; Education; Health; Labour and Social Services; Lands, Resettlement and Rural Development; Local Government and Housing; Water Development; Natural Resources and Tourism; and Roads and Road Traffic.

The Ministry of Lands, Resettlement and Rural Development is responsible for the following functions -

- (a) overall policy;
- (b) ensuring the implementation of the programme by -
  - (i) harnessing the services and resources of specialist agencies; and
  - (ii) employing development teams;
- (c) co-ordinating the activities of specialist agencies,
- (d) initiating the purchase of land required for this programme;
- (e) through the employment of a resettlement officer in each resettlement area, looking after the needs of the people moving into the area so that they may quickly settle into the new environment and utilize their new opportunities;
- (f) monitoring the progress of the resettlement program;
- (g) overall control and disbursement of the funds for the programme.

The Department of Marketing and Co-operatives within MLRRD is responsible for -

- (a) promoting the establishment of co-operatives for the supply of inputs and the marketing of agricultural produce and thereafter providing essential back-up support to ensure that the co-operatives operate as effective organizations;
- (b) assisting those groups wishing to establish themselves as registered co-operatives and run co-operative farms (Model B) and thereafter providing the necessary continuing service to these co-operatives. (Note: Certain farms set aside for development on the basis of Model B are being handed over to the Ministry of Youth, Sport and Recreation for them to run as co-operative farms/youth centres).

The Ministry of Agriculture is directly involved through Agritex, the Department of Veterinary Services, and the Agricultural Finance Corporation.

Agritex is the department most heavily involved. It is responsible for -

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- (a) initial investigations into the suitability of land being considered for resettlement purposes;
- (b) preparation of resettlement plans including the mapping of arable blocks, residential village sites, grazing areas and required infrastructural development such as roads;
- (c) providing the agricultural extension service for settlers; and
- (d) assisting in the training of resettlement officers and development teams.

Veterinary Services are involved in giving advice on dipping services.

The Agricultural Finance Corporation is responsible for providing seasonal and medium term credit finance. Credit availability to individual settlers will be in accordance with the Corporation's normal loan policy and the extent of available funds.

The Ministry of Education and Culture is responsible for advising on the siting and planning of schools. Funds for this purpose, allocated from those made available to the Ministry of Lands, Resettlement and Rural Development, provide limited assistance to settlers who wish to construct schools. Thereafter the schools are administered by Provincial Authorities to which funds may be channelled for future operation. Teachers' salaries and tuition fees are covered by grants from the Ministry of Education's budget.

The Ministry of Health is responsible for advising on the need for clinics in resettlement areas and the planning for their establishment. Initial provision is from funds allocated to the Ministry of Lands, Resettlement and Rural Development but clinics are, wherever possible, to be constructed on a self-help basis to reduce costs. Their subsequent administration is by Provincial Authorities.

The Ministry of Local Government and Housing is responsible for the establishment of local authorities covering the new settlement areas. The Division of District Administration within the Ministry currently provides the chairman of the provincial team.

The Department of Physical Planning is involved in the selection of sites for administrative centres and the responsibility for their subsequent planning.

The Ministry of Natural Resources and Tourism is available as required to assist with provisional surveys, demarcation, numbering and mapping of village stands and individual arable allocations or to train other staff to undertake these duties. Extension advice on individual woodlots will be available and forest nurseries will supply seedlings for these and communal woodlot plantations. The conservation situation will be monitored and the attention of appropriate authorities will be directed to problems.

The Ministry of Water Development is responsible for the design and construction of water supplies. The costs of installation will be met from the resettlement funds held by the Ministry of Lands, Resettlement and Rural Development with the future servicing and maintenance being initially a responsibility of the resettlement officer until a local authority assumes jurisdiction over particular resettlement areas.

The Ministry of Roads and Road Traffic is responsible for ensuring that adequate provision is made for main roads in resettlement areas. The majority of such areas are likely to be reasonably well supplied with existing feeder roads which are, however, in need of maintenance. Construction is financed from the Ministry of Lands, Resettlement and Rural Development resettlement funds, subsequent maintenance will be the responsibility of the local authorities, or, in the meantime, the resettlement officers.

#### E. Some Scheme Highlights

As indicated, settlers' tenure on the schemes is on the basis of permits to reside, cultivate and graze stock. These permits afford the settlers neither freehold tenure nor leasehold but simply permission to occupy and use a portion of land at the pleasure of the minister. The minister may revoke the permit for any reason he determines to be evidence of settler non-compliance with terms and conditions of occupation. Though lacking security, the holder is required to pay all necessary taxes, destock on command, maintain the site in clean and sanitary condition, follow recommended agricultural practices, refrain from damage to natural resources, and protect crops and animals from disease. Settlers may be required to live in villages and to accept any placement of infrastructure decided upon by the government. Settlers have not in fact yet been required to prove relinquishment of land rights in the communal areas, a complicated matter in and of itself, but they are required to discard a degree of security in the communal areas for the possibility of improved standards and altered life styles under governmental supervision in the schemes. The MLRRD is in the process of establishing a monitoring and evaluation unit which, among other tasks, will undertake investigations into these aspects of the program.

The schemes have been planned on the assumption that the settlers will have sufficient oxen as a group to obviate reliance upon tractor ploughing, although such services are being provided in certain schemes until the livestock herd is adequate to cover power requirements. A further assumption is the availability of boreholes, roads, and some dip tanks but the MLRRD will arrange for repair or construction of such infrastructure where needed. The Ministry will build clinics and staff accommodations on the basis of

one per every 300 to 500 families with the Ministry of Health providing needed medical assistants. Partly at the behest of the Ministry of Education, which wishes to encourage self-help activities, MLRRD is providing the materials for schools on the basis of one classroom for every 45 children. The settlers will be required to do the actual construction. MLRRD assumes that the Ministry of Education will make available staff and supplies to the same extent it does for other schools. Settlers are to be helped by Extension Assistants on the basis of one for every 200 families, animal health specialists for each 500 families, and cooperative development officers to help the settlers with marketing and inputs on the basis of one per every 600 settlers. For these officials, plus the resettlement officer (one for each 600 families), and those responsible for overall scheme administration, the government will build houses. Finally, it is assumed that after an initial period of separation from the district council areas, the settlement schemes will be reintegrated with the districts and that the settlers will be represented on the councils.

#### V. Progress to Date

Under the regular intensive resettlement program about 6,800 families have been settled on 17 separate schemes since the program started in November, 1980. The schemes implemented with U.K. support encompass 12 type A settlements and 5 type F settlements. The costs per family vary from \$2,000 to \$7,000 with the majority falling in the \$3,500 to \$4,900 range. Under the accelerated resettlement program 10 schemes have been completed involving about 2,700 families. An additional 7 type A schemes with a capacity of about 4,700 families were started in January, 1982. These are to be completed by June, 1982. The total area of all these schemes is 782,000 hectares. In addition to the above, there are 11 newly identified, intensive schemes at different planning stages. These schemes encompass roughly 450,000 hectares with a capacity for about 11,000 families and do not include some 200,000 hectares currently being planned for resettlement on an accelerated basis.

For the future it is the stated intention of the GOZ to settle an additional 162,000 families over the 3 year period starting July 1, 1982. This includes both intensive and accelerated programs (Approximately 20,000 intensive and 34,000 accelerated per year). Unresolved questions about these plans remain regarding the availability of necessary land, the capability of Government ministries to cope with the infrastructure development and service requirements and sources of funding.

1/ To date these target levels have not as a general rule been met although they have been achieved on selected schemes.

## VI. Issues

A. Land Distribution. The fundamental land distribution question before the Government of Zimbabwe is how far to redistribute land holdings to promote greater equity through measures such as intensive resettlement. To what extent should land distribution as distinct from commercial, agricultural wage labor, and industrial employment promote the general objective of equitable growth?

Under the Lancaster House agreements, the government has accepted the proposition that productive European commercial farmers should be allowed and encouraged to remain. At the same time the MLRRD up to this point has recognized that ecological and economic considerations prevent more intensive settlement than that planned unless greater investments in irrigation are launched. The essential problem before the country is that there are still large numbers of people who have not yet acquired an economic stake in independent Zimbabwe. The Government may have difficulty holding to even the existing income targets for the settlement schemes as long as these pressures remain, for even if resettlement is not the best answer to under or unemployment, it is one of the quicker answers. Nevertheless, it is apparent that the quantity of land available is probably insufficient to allow the program to meet land expectations and thereby insufficient to significantly impact on equity. The 18,000 families to be settled on the initial 1.1 million hectares represent less than 3 percent of the estimated communal farmers. A similar size program each year would absorb less than one half of the expected number of new labor market entrants. If the much larger target number of 165,000 families were settled over the next three years this would have a substantial effect. But even at this level, while land distribution can help meet equity and employment concerns, it is not "the" long run solution.

B. Land Tenure. Among the major land tenure issues which face both the settlement areas and the country more broadly are (1) whether land tenure should be on identical terms across the country; (2) how much security of tenure to permit or encourage; (3) how far to supplant traditional land tenure practices with "modern" ones; (4) how much negotiability to permit in land tenure holdings; (5) whether to permit or discourage families holding employment both in urban and rural areas, or in communal and settlement areas, -- an issue which directly affects the role of women in the development of Zimbabwe; (6) how far to proceed with cooperative activity in cultivation, grazing, and villages; and (7) whether management of land allocation should be left to local district councils, chiefs, or supervised to a greater degree by the ministry.

Equity is the principal issue in determining how far to seek tenure conformity throughout the country, the question being whether the government should seek to legislate such uniformity at the expense of customary variations and on terms that, left to their own devices, not everyone would choose. Clearly, the government wishes both to honor popular aspirations and valued customs, on the one hand, but it also wishes to eradicate the most visible vestiges of past racial inequalities, e.g. the division of rural land into commercial and communal land categories.

The government has shown some disposition in the settlement schemes to limit the extent of tenure security in the interest of ensuring beneficial occupation, promoting new forms of rural socio-economic organization, and preventing wealthier rural citizens from acquiring the assets of the poorer ones. Such a strategy can be defended on both conservation and development grounds, for it is not necessarily the case that either conservation or growth can occur without the state playing a significant leadership role. But security is one of the most important concerns of rural citizenry living relatively close to the margin of survival. There has been some evidence in the settlement schemes that prospective settlers are wary of giving up more certain tenure in the communal areas for a situation offering more opportunity but less security. The Government appears to have recognized the strong inclination on the part of peasant farmers, particularly on the settlement schemes, for secure individual tenure and to be aware of the need to avoid some of the excesses of forced villagization-Tanzania style. Its strategy to date has been to state a clear preference for more cooperative endeavour by rural people but from a position in which individual control of land is established. The Government appears to seek cooperation among individuals rather than the submersion of individuality in collective rural enterprise.

The issues of traditional tenure practices, negotiability in and dual holdings by individual families together raise important questions for all government objectives. In the interests of equity, government might well decide to allow individuals freedom on an equal basis to determine how many holdings to maintain, whether or not to sell land for a consideration, and whether or not to adhere to traditional land tenure practices. The problem, however, is a classic one of political freedom becoming the precondition for the development of economic inequality which the government clearly seeks to prevent. Moreover, there is no guarantee that without state intervention current practices leading to ecological degradation in the communal areas will not intensify and be transferred to the settlement areas. It is not clear, moreover, whether rural economic growth can occur at the desired pace were the government to adopt such a laissez faire posture. The other principal equity concern involved is the role of women in development. For proposals to force urban employees to relinquish their holdings and move their families to the cities implies loss of independence for women, deprivation of a significant development role, and the presumption that women simply aren't the equal of men as farmers - a point that some otherwise quite conservative extension officers dispute.

### C. Relative Emphasis

As designed and being implemented, resettlement is rather costly on a per family basis vis-a-vis other rural development efforts. Outside of the direct costs for land and infrastructure, which are running at about \$4,000 per family, there are also heavy demands on scarce governmental manpower resources. In effect a very small number of families are being the rather favoured recipients of significant resources which perhaps could be directed elsewhere with greater net impact for larger numbers of people and consequently more effect on government equity concerns

This latter point becomes an even greater concern as the size of the resettlement effort increases. Both political and economic arguments support a land resettlement program that seeks to use a scarce resource more effectively. Similarly, political and equity arguments support some level of program to redress past inequities in land ownership. However, when the resettlement program threatens to absorb a large share of available rural development resource allocations, and perhaps to reduce overall agricultural output or employment, then the validity of any arguments must be closely examined. The resettlement program may be jeopardizing improved opportunities for a much larger population, meaning the improvement for a few may be clearly outweighed by the losses to many.

An emphasis on resettlement programs that is matched by major expansions in other programs directed at communal residents, and that enables the maintenance of overall output, would seem appropriate. For outside of social service efforts which improve equity there is no certainty that other programs will necessarily have equity benefits. Nor is it always certain that other programs would provide higher economic returns. But this does suggest the need to ensure that the economic analyses performed for the settlement schemes be done with integrity so that the returns projected are reasonable.

The conclusion is that investments in land resettlement need to be weighed against investments in other programs recognizing both economic and political costs and benefits. It would appear that this weighing would suggest a modest program.

#### D. Agricultural Production

A long run issue for the land resettlement program is the potential impact of the program on food supplies and export earnings. Zimbabwe is currently in a luxurious and enviable position with an agricultural sector providing ample food supplies and about 40 percent of export earnings. Most of this production comes from large scale commercial farms - the same category that is to provide under and unutilized land for the resettlement program. As a group these farms do have some quantity of un and underutilized land that can be allocated for settlement with very little impact on overall agriculture output. At some point, however, the majority of this type of land will be gone. Only well and already fully utilized land will remain. Continuing the resettlement program in that situation could have a potentially serious aggregate production effect if the well utilized is resettled and farmed in a manner so that production sinks to average levels currently attained on communal areas. Resettlement on currently well utilized land could also affect export earnings if the pattern of production were to change i.e., if flue-cured tobacco

1/ Preliminary proposals put forward suggest that resettlement will absorb nearly 50 percent of the agricultural/rural development investments during the three-year transitional plan period.

was replaced with maize or other crops.

Of course, a decline in output need not automatically occur because there is no inherent reason why smallholders can not be as productive as large scale farmers. In fact, in many parts of the world smallholders are as or even more productive than larger farmers. But in at least the short-run, until necessary support infrastructure is operating efficiently, a decline in the output from already well utilized land is probable.

The effect of resettlement on exports is largely a function of what is currently being produced and the willingness and ability of settlers to continue to produce these crops. It may be highly difficult for a group of settlers to continue blue-cured tobacco production requiring close management of a central curing facility. There would also probably be a greater tendency by settlers to emphasize food crops, to be less market oriented. Again there is no certainty that resettlement of already fully utilized areas would result in these changes but there are certain factors which suggest this would occur. The GOZ will undoubtedly need to make special efforts to prevent any serious deterioration in production levels and exports as the resettlement program continues.

#### VII. Possible Areas of Assistance

As the resettlement program has developed, the needs for assistance have also been developing and changing. The biggest constraint to date has been the availability of resettlement personnel to implement the plans proposed i.e. to complete land purchase, to select the settlers, to perform the necessary physical infrastructure work prior to settler arrival, to actually get the settlers established, etc. The result has been a program consistently behind schedule, partly due to inadequate estimates of the time necessary for an inexperienced organization to get the program underway i.e. to train staff, to develop procedures, to simply learn.

The program now appears to be in accelerating mode. The number of development teams is up to 28, land clearing equipment is at work and the land purchase and settler selective procedures are being implemented more smoothly. In a future situation where the targets were only slightly larger there would seem to be few problems. But the government is aiming to accelerate the program to a undetermined but perhaps very large degree. This proposed increase in pace appears likely to be constrained by expanded, but still limited, implementation capabilities as well as planning and funding constraints. Further, since resettlement is only the means to an end of improved living, the settlers will need to be supported once they are settled. In seeking to provide these needed support services the government will confront the sector-wide problems of limited manpower and other resources.

In this situation there are several possible ways of supporting the resettlement program and meeting the GOZ target of widening donor support beyond that provided by the ODA and the EEC. A first general approach would be to support land resettlement directly. This could be in the form of funding for infrastructure development (water, roads, facilities) or for support of specific programs in the resettlement areas. Such assistance might be directed to particular settlement schemes or it might be more broadly based with no targeted schemes. It could include needed commodities, training, local cost funding and perhaps technical assistance in planning, evaluation or more technical areas such as land use planning where Zimbabwe is short of manpower.

A second approach would be to assist less directly as part of efforts aimed at general rural development constraints. This assistance would be provided in agricultural training with the expectation that some of the trainees would provide services to resettlement schemes. Perhaps as part of a larger program specific training modules for settlement staff might be developed. Similarly, assistance in agricultural research would include those crops of importance to settlement schemes while support for cooperative development would encompass cooperatives in settlement areas. An expansion in credit funds could permit the allocation of additional funds for settlement schemes.

No particular assistance strategy is being recommended here. Rather any assistance program should emerge from joint consultation with the GOZ as the overall sector assistance package is developed.

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