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**ZIMBABWE AGRICULTURAL SECTOR ASSISTANCE  
PROGRAM  
(ZASA)**

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**IMPACT EVALUATION**

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## ABBREVIATIONS AND ACRONYMS

ADA	Agricultural and Development Authority
AFC	Agricultural Finance Corporation
AGRITEX	Agricultural Technical and Extension Services, Ministry of Lands, Agriculture, and Rural Resettlement
AID	Agency for International Development (US)
AMA	Agricultural Marketing Board
BLOC	Bank Letters Of Credit
CFU	Commercial Farmers' Union
CGA	Coffee Growers Association
CIP	Commodity Import Program
CMB	Cotton Marketing Board
CSC	Cold Storage Commission
CTC	Cotton Training Center
DLOC	Direct Letters Of Commitment/Credit
DMB	Dairy Marketing Board
DNR	Department of Natural Resources
DRSS	Department of Research and Specialist Services, Ministry of Agriculture
EEC	European Economic Community
GDP	Gross Domestic Product
GMB	Grain Marketing Board
GNP	Gross National Product
GOZ	Government of Zimbabwe
ForEx	Foreign Exchange
IBRD	International Bank for Reconstruction and Development (World Bank)
ICRISAT	International Crops Research Institute for the Semi-Arid Tropics
IFAD	International Fund for Agricultural Development
IMF	International Monetary Fund
ISF	Irrigation Support Fund
LOP	Life of project
MCCD	Ministry of Community and Cooperative Development
MEEU	Mobile Environmental Education Units
MET	Ministry of Environment and Tourism
MEWRD	Ministry of Energy and Water Resources and Development
MFEPD	Ministry of Finance, Economic Planning and Development
MIC	Ministry of Industry and Commerce
MLARR	Ministry of Lands, Agriculture and Rural Resettlement
MOE	Ministry of Education
MS	Masters' Degree

<b>MT</b>	<b>Metric Ton (1,000 kgs. or 2200 lbs.)</b>
<b>NFAZ</b>	<b>National Farmers Association of Zimbabwe</b>
<b>NFIF</b>	<b>National Farm Irrigation Fund</b>
<b>ODA</b>	<b>Overseas Development Administration (U.K. Aid)</b>
<b>PAAD</b>	<b>Program Assistance Approval Document</b>
<b>PhD</b>	<b>Doctoral Degree</b>
<b>SADCC</b>	<b>Southern Africa Development Coordination Conference</b>
<b>SFCS</b>	<b>Small Farmer Credit Scheme</b>
<b>UDI</b>	<b>Unilateral Declaration of Independence (1965)</b>
<b>UHT</b>	<b>Ultra-High Temperature (preservation process for milk)</b>
<b>UNDP</b>	<b>United National Development Program</b>
<b>USAID</b>	<b>United States Agency for International Development</b>
<b>UZ</b>	<b>University of Zimbabwe</b>
<b>VOC</b>	<b>Vote of Credit; accounting mechanism for donor-funded projects</b>
<b>WID</b>	<b>Women in Development</b>
<b>ZASA</b>	<b>Zimbabwe Agricultural Sector Assistance Program</b>
<b>ZNFU</b>	<b>Zimbabwe National Farmers Union</b>

At Independence, Zimbabwe started to rebuild a war-torn society with a bankrupt treasury. Yet during the first decade of Independence GOZ, in partnership with donors that included USAID, made remarkable strides in agriculture, health, and education. Zimbabwe's commitment to increasing the productivity of the commercial sector, and promoting widespread distribution of benefits, the role of agriculture has been especially important, particularly given its major role in providing food security, employment, and local and foreign exchange earnings.

Within this context of economic and agricultural opportunities and constraints, GOZ and USAID developed the ZASA program. It was to promote continuing growth of the whole agricultural sector through both continued support to the commercial subsector and expansion and extension of the services needed to allow the communal sector to participate equitably in this growth. ZASA consisted of a commodity import program that generated local currency to be invested in smallholder development.

### Commodity Import Program

#### Concept

Chronically short of foreign exchange, commercial farmers and public agencies were able to use plentiful local currency to obtain the foreign currency through ZASA that they needed for imported goods that were required to increase their productivity and export earnings. Local counterpart funds generated by these transactions were invested directly in activities aiding increases in smallholder productivity and incomes. Public sector CIP investments further strengthened the communal and commercial sectors; helped marketing boards, coops, and parastatals to expand services into communal areas that had once been available only to commercial farmers.

#### Procedures

Though different in nature from standard CIPs because of its agricultural and small farmer focus, the ZASA program used relatively standard and well-established CIP procedures to meet project objectives. These procedures were improved during the life of the ZASA project, particularly by substituting Direct Letters of Commitment for cumbersome Bank Letters of Credit.

#### Performance

Out of total authorizations of US\$62 million, the ZASA program received US\$55 million from 1983 to 1990. Of this, US\$43 million was allocated to the CIP, the first US\$40 million has generated Z\$62 million in local currency. The balance of funding was spent for technical assistance, overseas training, and equipment imports by public agencies.

ZASA's focus was appropriately on stimulating agriculture, which received at least 80% of all ZASA CIP funding. ZASA's also focussed on the private sector, which received 87% of CIP funding, or approximately US\$37 million. Agriculturally-oriented public sector agencies received the balance of approximately US\$6 million.

#### Efficiency

While improvements in procedures made in 1989 increased program efficiency, some importers still find procedures cumbersome. Further refinement is appropriate, including increased use of the local banking system, simplifying the application process, and adjusting the exchange rate to reflect the real value of money and/or making CIP funds available through a currency auction.

#### Effectiveness

The ZASA program has had an impact greater than the levels of funding provided might suggest, providing a generally higher return than other sectors. This is directly due to ZASA investments that helped increase productivity, lower costs, modernize outdated equipment, and put broken-down equipment back into the fields, thus expanding production and increasing export earnings.

- Overall, each US dollar invested in agriculture generally returns between US\$4 and US\$5 in foreign exchange earnings. For some subsectors, like coffee, the return is as high as US\$12.

## **Local Currency Program**

### **Concept**

The ZASA local currency program channeled CIP-generated funds into investments for promoting production in communal areas leading to more marketed goods and thus higher incomes among smallholders. These investments were specifically targeted at overcoming seven major constraints including:

- Agricultural research
- Agricultural extension
- Agricultural credit
- Marketing & input supply
- Land and water use
- Human resource devt.
- Policy planning

### **Procedures**

The allocation of ZASA local currency funds was overseen by an inter-ministerial working group within the Ministry of Finance, Economic Planning and Development that includes donor representation. This committee receives applications from ministries and public sector agencies for projects through the normal government PSIP channels, evaluates them, and makes allocations consistent with program objectives. The shift of responsibility from the planning to the foreign assistance sections of MFEPD meant that important opportunities for policy dialogue clearly envisioned by ZASA designers have been missed.

### **Performance**

From 1983 through 1990 Z\$68 million in local currency funds, plus US\$12 million in technical assistance and commodity import funds for public agencies, was allocated. This funding went to a total of 84 sub-projects from 17 different ministries, agencies, and parastatals, plus one NGO. Allocations have averaged Z\$1 million per project and Z\$4.8 million per agency since 1983.

Of the funds, Z\$21 million (34%) supported marketing and input supply projects; Z\$18 million (29%) went to education and training.; land and water use received almost Z\$11 million (18%); extension activities absorbed Z\$6.6 million (11%). Lesser amounts went to agricultural research (Z\$3.6 million) and credit (Z\$2 million), while token amounts went to policy planning, monitoring, and evaluation. Of the US\$ 12 million allocated for technical assistance, overseas training, and hard currency equipment purchases for public sector operations, the largest amount, US\$ 6 million (50%), went for higher education and short-term training abroad; US\$ 2.6 million (22%) was allocated to support extension efforts; and US\$ 1.6 million (13%) supported research.

### **Efficiency**

The ZASA program has been an efficient, flexible, and responsive mechanism that has allowed a large number of small projects to be funded with relatively few bureaucratic problems. Monitoring, evaluation, and reporting, however, has been problematic and important data have been either unavailable, out of date, or difficult to obtain.

### **Effectiveness**

The ZASA program has directly contributed to GOZ's commitment to "growth with equity," having an impact beyond the dollars that have been invested. While constituting only a small part of the GOZ budget, ZASA has provided a higher marginal return than many other larger projects, helping make GOZ's larger investments more productive. These resources have:

1. Increased smallholder agricultural production, productivity, and on-farm income through better access for the smallholder to improved agricultural research, technology, extension, marketing, inputs, and credit services.

2. Stimulated productivity and production growth in the private commercial agricultural and equipment supply sectors, resulting in an increase in exports that has significantly multiplied the nation's scarce foreign exchange reserves beyond the hard currency provided by the project.
3. Expanded agricultural education by doubling university enrollments, strengthened the Faculty of Agriculture, enabled college education of female agriculturalists for the first time
4. Provided mid-career and post-graduate short term training and study tours that have improved productivity and morale in educational institutions, government, and parastatals.
5. Created an effective sub-project review process built around an inter-ministerial Working Group that has given beneficiary ministries a voice in resource allocations and expedited decisions.
6. Moved projects forward that had been delayed because they were considered too small or too risky
7. Funded unconventional or innovative problem-solving, such as the creative use of local currency to arrange a barter for improved coffee equipment from a third country
8. Provided missing resources needed to complete projects hurt by external factors; minimized the waste associated with uncompleted programs
9. Enabled timely response to emergencies with provision of funds, equipment, supplies, and/or outside expertise, such as locust control and veterinary toxicology

The ZASA program has not been without flaws, however, including:

1. Limited composition and mandate for the Working Group leading to missed opportunities to promote policy dialogue on issues that threaten progress already made
2. Weak reporting, monitoring, and evaluation of ZASA activities
3. No specific objectives for assisting the female farmers who are vital to the smallholder sector

### **Lessons Learned**

The ZASA model is a powerful tool for agricultural development in Zimbabwe and full advantage should be taken of it. Specifically:

- Future programs should build constructively upon the CIP model, its local currency program, and its potential for backing up policy debate with fundable projects.
- Programs must be adequately funded to engage the attention of senior policy makers and thus to have impact and policy relevance. Had the ZASA program had access to consistent funding on the order of US\$10 million, as provided during the early years, its impact would have been multiplied significantly.
- Participation is essential of policy makers who can use program flexibility to wrestle with complex policy issues through pilot implementation of innovative ideas rather than theoretical debate.

## **SECTION A**

# **THE ZASA PROGRAM IN REVIEW**

## **Summary of Conclusions**

### **1. Organization of the Report**

This report assesses the impact of the Zimbabwe Agricultural Support Assistance (ZASA) program which has provided both foreign and local currency assistance to the agricultural sector since 1983.

The first section provides an overview of the ZASA program, a summary of overall project impacts, and conclusions, recommendations, and lessons learned for future programs, including both the CIP and local currency components.

The second section is a detailed case study of the largest directly productive local currency project investment by ZASA: the allocation of nearly Z\$7 million for a modern coffee processing and storage facility.<sup>1</sup> This case analyzes the foreign exchange requirements of the coffee industry, the rationale for funding, the impact and foreign exchange returns to this investment, and the feasibility of expanding smallholder coffee production with future investments.

The third section of the report describes the general economic and agricultural conditions in the country at Independence, how they changed during the life of the project, and how ZASA was conceived within that context.

The following sections review the program components in detail. The fourth section focuses on the commodity import program used to generate local currency funds for the program. It analyzes the differences between the ZASA CIP and other CIPs run by USAID and other donors, reviews the impact of the ZASA CIP on the agricultural sector and the economy as a whole, and makes recommendations for future programs based on the lessons of the ZASA CIP.

The final section reviews the local currency side of the program, its operation and the role of the allocations made to address the 7 constraint areas. For each area, the report describes the problems which ZASA-funded projects attempted to address, and analyzes the performance and impact of these projects on both the implementing institutions and on the target groups. A special chapter reviews ZASA's impact on the role of women. The section concludes with analysis of ZASA's part in GOZ's policy and planning process, including the function of the Working Group, which is the principal feature that differentiates ZASA from other projects funded by USAID and other donors.

The annexes include short papers on the impact of ZASA funding on individual institutions, on recurrent budget implications of funding, on the role of the Working Group, and data on funding by ministry and agency; they also include the scopes of work for this evaluation, the evaluation methodology, a list of individuals and institutions contacted, and a bibliography of published sources.

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<sup>1</sup> Second only to the Z\$8 million in local currency and US\$5 million invested in the University of Zimbabwe.

## **2. Summary of Conclusions**

The ZASA program has met its overall program objective of supporting GOZ efforts to improve the economic status of the smallholder, contributing to the implementation of GOZ's commitment to "growth with equity." While constituting a relatively small part of the GOZ's total public sector investment program in agriculture, ZASA has provided important budgetary resources at critical times; these resources have helped increase smallholder agricultural production, productivity and on-farm income through better access for the smallholder to improved agricultural research, technology, extension, marketing, inputs, and credit services.

At the same time, by providing critically needed foreign currency through a CIP-like program, ZASA has helped stimulate productivity and production growth in the private commercial agricultural and equipment supply sectors. This has resulted in an increase in exports that has significantly multiplied the nation's scarce foreign exchange reserves beyond the hard currency provided by the project.

Furthermore, the project has contributed significantly to the expansion of agricultural education at the university, college, and field level, strengthening the Faculty of Agriculture of the University of Zimbabwe and the facilities at the country's two agricultural colleges. In addition, now there are important new programs for female agriculturalists as well as mid-career, post-graduate training, and short courses for professional staff and farmers.

The ZASA program has not been without flaws, although none of them has seriously jeopardized the program's overall mission. The creation of an innovative and effective sub-project review process built around an inter-ministerial ZASA Working Group has given beneficiary ministries a voice in ZASA resource allocations and significantly expedited these decisions. Yet the Working Group's composition and mandate have been limited. It has thus missed important opportunities to promote needed policy dialogue. Now, emerging problems and policy issues which have not been dealt with threaten the gains made in the post-Independence decade. This problem was exacerbated by weak reporting, monitoring, and evaluation of ZASA activities.

With Zimbabwe now facing mounting structural, foreign exchange, and budgetary constraints, exacerbated by regional and global pressures on the local economy, a program like ZASA is needed more than ever. At the same time, a new climate of national dialogue is opening up opportunities for economic and trade liberalization, elements that would enhance the returns from a program similar to ZASA.

### **Commodity Import Program**

#### **Concept**

Though contemplated principally as a mechanism for generating the local currency required for small farmer development, the ZASA CIP, in effect, enabled each USAID dollar to work twice, once by providing needed foreign exchange to commercial

farmers and public sector institutions, and a second time for user-determined local currency projects.

- Chronically short of foreign exchange, commercial farmers and public agencies were able to use plentiful local currency to obtain the foreign currency needed for imported goods that they needed to increase their productivity and export earnings
- Local counterpart funds generated by these transactions were invested directly in activities aiding increases in smallholder productivity and incomes
- Public sector CIP investments further strengthened the communal and commercial sectors; helped marketing boards, coops, and parastatals to expand services into communal areas that had once been available only to commercial farmers.

## Procedures

Though different in nature from standard CIPs because of its agricultural and small farmer focus, the ZASA program used relatively standard and well-established CIP procedures to meet project objectives. These procedures were improved during the life of the ZASA project:

- Under the original CIPs 604 and 607 (1983-1988) cumbersome and costly bank letters of credit were required and minimum allocations were US\$10,000. Applications far exceeded available funds, delays were frequent, and MIC often reduced application amounts to levels that made relevant purchases difficult or impossible.<sup>2</sup>
- After 1989, under CIP 607-A, direct letters of commitment were used and the minimum funding amount was raised to US\$50,000. Furthermore, MIC was required to accept or reject applications, rather than negotiate lower amounts. Procedures were simpler and clearer, applications fewer and less costly to manage. By December 1990 all but US\$90,000 of available funds had been allocated and, unless further funds are added, the ZASA CIP is basically completed.

## Performance

Out of total authorizations of US\$62 million, the ZASA program received US\$55 million from 1983 to 1990. Of this, US\$43 million was allocated to the CIP, generating Z\$62 million in local currency. The balance of funding was spent for technical assistance, overseas training, and equipment imports by public agencies.

ZASA's focus was on stimulating agriculture, which received at least 80% of all ZASA CIP funding.<sup>3</sup> This is appropriate given the major role that agriculture plays in the local economy and the foreign exchange earnings the sector generates. Overall, agriculture not only feeds the nation and 70% of the population depends on agriculture for its subsistence, but it also accounts for about 40% of the nation's export earnings.

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<sup>2</sup> A farmer cannot buy half a tractor, for example,

<sup>3</sup> A relatively small amount of CIP funding went into non-agricultural uses in early years and to mining and transport in 1988 only.

ZASA's parallel focus was on the private sector, which received 87% of CIP funding, or approximately US\$37 million. Public sector agencies, which used their ZASA funds entirely for agriculture, received the balance of approximately US\$6 million.

## **Efficiency**

Overall, it seems unlikely that any other type of assistance program could have disbursed the amount of funds in as short a period of time as was achieved by the ZASA CIP program.

While improvements in procedures made in 1989 further increased program efficiency, some importers still find procedures cumbersome. Additional refinement is appropriate if future CIP-like programs are considered in Zimbabwe. Specifically, GOZ and USAID should study the feasibility of:

- Simplifying the application and bank letter of credit processes

An important constraint on program efficiency has been the artificially high value placed on local currency. Each CIP dollar yielded much less local currency than the real value of foreign exchange to the economy, encouraging capital-intensive rather than labor-intensive investments. Accordingly:

- Adjustment in the exchange rate is necessary in any future CIP program. A more realistic exchange rate would generate more local currency funds for smallholder development projects and reduce the risks of abuse in administrative allocation of foreign exchange.
- In the absence of such changes GOZ and the donor may want to look at the feasibility of making CIP funds available through a currency auction in which all eligible parties could participate.

## **Effectiveness**

The ZASA program has had an impact greater than the levels of funding provided might suggest, providing a generally higher return than might accrue from investments in other sectors. This was directly due to ZASA investments that helped increase productivity, lower costs, modernize outdated equipment, and put broken-down equipment back into the fields, thus expanding production and increasing exports which earn more hard currency.

- Overall, each US dollar invested in agriculture generally returned between US\$4 and US\$5 in foreign exchange earnings. Private sector agriculture returns on foreign exchange investments were on average almost 5:1 and, for some subsectors, the ratio was as high as 12:1
- The decision to fund public sector agencies, as well as the private sector, was wise. All public sector CIP funds went to agriculture and nearly all complemented the local currency program goal of enhancing service and support to small farmers.

- The impact of CIP investments on employment was positive because of production increases, although less so than if the exchange rate had reflected real currency values. ZASA CIP investments also helped the nation increase communal cotton production dramatically and become self-sufficient in wheat.

## Local Currency Program

### Concept

The main thrust of the ZASA local currency program was to channel funds generated by the CIP component into investments for promoting production in communal areas leading to more marketed goods and thus higher incomes among smallholders. These investments were specifically targeted at overcoming seven major constraints perceived to be impeding government's efforts to promote communal area agricultural development: agricultural research, agricultural extension, agricultural credit, marketing and input supply, land and water use, human resource development, and policy planning.

### Procedures

The allocation of local currency funds under the ZASA program was overseen by an inter-ministerial working group, chaired by the Ministry of Finance, Economic Planning and Development and including donor representation. This committee received applications from ministries and public sector agencies for projects through the normal government PSIP<sup>4</sup> channels and evaluated them as to whether they:

- Would help relieve the identified constraints
- Would potentially improve the welfare of smallholders
- Were reasonable in terms of investment rationale
- Would contribute to an identified budget shortfall
- Would impose an unacceptable recurrent cost burden on government

Consistent with the goal of ZASA to contribute to refinement of GOZ agricultural policy through ongoing dialogue, the ZASA Working Group included senior policy makers and planners during the initial years when funding levels were at least Z\$10 million per year. Over time problems developed. Because chairmanship of the committee was given to the Ministry's foreign aid branch, policy dialogue was limited from the start. The failure to establish a secretariat has impeded following-up with ministries on requested reports which were not provided in a timely manner. Generally, while information did flow through the system and reports were made to AID as required, there were problems with GOZ in moving funds from the Treasury to specific projects. In addition, as annual funding levels dropped from US\$10 million to US\$5 million or less, membership shifted gradually from policy makers to operational staff. Furthermore, membership was heavily dominated by the Ministry of Finance with inadequate representation from implementing ministries, agencies, and departments; many ministries and agencies only attended ZASA meetings when they had project funding requests present. Finally, existing legal structures and procedures did not provide a means for including direct representation from farmers' organizations, NGOs, the private sector, or women.

<sup>4</sup> Public sector investment program for which established application and appraisal procedures exist.

## Performance

From 1983 through 1990 Z\$62 million in ZASA local currency funds, plus US\$12 million in technical assistance and commodity import funds for public agencies, was allocated. This funding went to a total of 84 sub-projects sponsored by 18 different agencies from the ministries and individual agencies responsible for finance, agriculture, resettlement, cooperatives, education, environment, water resources, education, forestry, and facilitated the production and marketing of grain, cotton, coffee, livestock, and dairy products. Allocations averaged Z\$1 million per project and Z\$4.8 million per agency since 1983.<sup>5</sup>

Of local currency funds, Z\$21 million (34%) supported marketing and input supply projects, while Z\$18 million (29%) went to education and training efforts. Land and water use received almost Z\$11 million (18%) and extension activities absorbed Z\$6.6 million (11%). Lesser amounts went to agricultural research (Z\$3.6 million) and credit (Z\$2 million), while token amounts went to policy planning, monitoring, and evaluation. Of the US\$ 12 million allocated for technical assistance, overseas training, and hard currency equipment purchases for public sector operations, the largest amount, US\$ 6 million (50%), went for higher education and short-term training abroad, while US\$ 2.6 million (22%) was allocated to support extension efforts with imported communications equipment. US\$ 1.6 million (13%) supported research efforts, largely through provision of technical assistance.

**Table A.1**

**Summary of ZASA Local Currency and US\$ Allocations & Expenditures by Constraint Area**

Constraint Area	ZASA Allocations			
	Local Z\$	%	US\$	%
Agricultural Research	3,652,393	6%	1,702,474	14%
Agricultural Extension	6,611,186	11%	2,650,694	22%
Agricultural Credit	2,044,000	3%	13,500	0.1%
Marketing and Input Supply	20,937,600	34%	645,668	5%
Land & Water Use	10,681,932	17%	968,071	8%
Human Resources, Training for Agric.	18,173,873	29%	5,954,244	49%
Policy Planning	32,000	0.05%	194,750	1.6%
Monitoring/Evaluation	13,550	0.02%	0	0
<b>TOTAL</b>	<b>62,146,534</b>	<b>100%</b>	<b>12,129,401</b>	<b>100%</b>

Source: USAID, MFEPD, November 1990

## Efficiency

The ZASA program has proved to be an efficient, flexible, and responsive mechanism that has allowed a fairly large number of small projects to be funded with relatively few bureaucratic problems. It has promoted quick decisions, helped facilitate innovative and policy relevant projects, made up for GOZ budgetary shortfall, and addressed emergencies with relatively few administrative shortcomings. Furthermore,

<sup>5</sup> A total of US\$43 million in CIP funds generated Z\$62 million over LOP when calculated at the exchange rates prevailing at the time allocations were actually made. The figure given here represents the value of local plus US\$ allocations valued at the exchange rate prevailing in December 1990.

the donor appears to have received all required accounts and financial reports in a timely manner.

The same cannot be said, however, about the internal GOZ organizational and administrative environment within which the project has operated. On the one hand it is quite understandable that during the first decade of Independence, facing a critical shortage of skilled and experienced managers, the GOZ system should move cautiously and deliberately. Administrative and reporting delays would have been legitimately expected. Yet, even in the face of major constraints, the GOZ is credited by many observers with having arguably one of the most efficient administration systems in Africa. It is therefore surprising that the internal ZASA project reporting and monitoring process was not more efficient than it has been. Monitoring, evaluation, and reporting to the ZASA Working Group on the implementation and impact of individual sub-projects were infrequent and important data were either unavailable, out of date, or very difficult to obtain. As the following table indicates, approximately one-third of all reports requested by the ZASA Working Group were not received. Similarly, in conducting this evaluation a similar proportion of reports to be submitted to the evaluation team were not forthcoming, even several months after field work was completed.

**Table A. 2**

**Summary of Reports Submitted to ZASA and to Evaluation Team by Ministries/Depts./Agencies**

Ministry	Dept/Agency	Reports to ZASA		Reports to Evaluation		Percent/Total
		No. Req'd	No. Submit'd	No. Req'd	No. Submit'd	No. Req/Submit'd
Min. of Finance, EPD				4	1	25%
MLAgric. RR Ministry		1	1	4	1	40%
	AGRITEX	4	0	1	0	0
	Vet. Service	3	2	2	1	60%
	D. Research SS	2	1	2	1	50%
	Agric. Colleges			2	1	50%
	Agric. Devt. Auth.	1	0	1	0	0
Univ. of Zimbabwe				1	1	100%
Mktg. Bds.	Grain Mktg. Bd.	10	10	1	1	100%
	Cotton MB/CCGAZ	3	1	1	1	50%
	Dairy Mktg. Bd.			2	2	100%
Ag. Finance Corp.		2	2	1	1	100%
MCCD	Coops			1	1	100%
	Women's Affairs			1	0	0
Min. of Industry & Commerce				3	1	33%
Commercial Farmers Union				3	1	33%
Coffee Growers Assn.				3	4	133%
National Farmers Assn. of Zim.				1	1	100%
Zimb. Natl. Farmers Union				1	1	100%
<b>TOTAL</b>		<b>25</b>	<b>16</b>	<b>31</b>	<b>19</b>	<b>62%</b>

Source: MLARR; Quarterly Report on Official Development Assistance & NGO Funded Rural Settlement Projects, 10.25/87; USAID records; Evaluation Team files.

GOZ procedures provide for the prefunding of projects. The Treasury reflects payment for projects as finally paid only when the funds are actually drawn down against the exchequer. While flow of funds between donor and GOZ, as well as reporting by GOZ to the donor, may occur in a timely fashion, internal GOZ accounting and flow of funds are often delayed. The following table, summarizing the recorded expenditure of allocated ZASA funds, suggests the nature of the problem. It indicates

that only half of the ZASA funds were recorded by MFEPD as expended as of June 30, 1990, as reflected on the drawdown against the Treasury. This does not imply that half of the ZASA projects have not been implemented; indeed, some have been completed by drawing on credits through the prefunding process although they still show little or no expenditure. This discrepancy indicates the magnitude of the reporting and monitoring problems which ZASA project have faced. It also suggests the accounting delays that agencies and departments encounter in reporting expenditure and in being reimbursed by the GOZ Treasury under ZASA funding procedures.

**Table. A.3**

**Summary of ZASA Local Currency Allocations and Expenditures by Constraint Area**

Constraint Area	Allocation Local Z\$	Expenditure to 6/30/90 Z\$	Expend. as % of Alloc.**
Agricultural Research	3,652,393	1,597,879	44%
Agricultural Extension	6,611,186	1,776,933	27%
Agricultural Credit	2,044,000	2,000,000	98%
Marketing and Input Supply	20,937,600	14,216,720	68%
Land & Water Use	10,681,932	2,735,628	26%
Human Resources, Training for Agric.	18,173,873	9,112,175	50%
Policy Planning	32,000	0	0
Monitoring/Evaluation	13,550	2,625	19%
<b>TOTAL</b>	<b>62,146,534</b>	<b>31,441,960</b>	<b>50%**</b>

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

## Effectiveness

In light of GOZ absorptive capacity, contribution to the smallholder sector, and return on investment the priorities reflected by these allocations are not inappropriate. By increasing marketing and input supply facilities, a well-established and efficient marketing mechanism created for the commercial sector was transformed to serve smallholder needs, contributing to major increases in communal area marketed production. Given expanded needs for trained staff, together with a loss of senior technicians following Independence, major investments in education and training were also sound, strengthening the University's faculty of agriculture, technical agricultural colleges, farmer training programs, and increasing the number and proportion of trained female master farmers and agricultural graduates.

Modest investments in land and water use, particularly irrigation, as well as in agricultural extension and related activities, contributed to the testing of new models for rangeland management, natural resource conservation, and expansion of area under irrigation. Of these funds, the Z\$7 million invested in irrigation has yet to pay a significant dividend to communal farmers. Commercial farmers made important use of irrigation funds, however, contributing significantly to national self-sufficiency in wheat production.

Important questions have been raised about the paucity of funds allocated to research, credit, policy planning, and evaluation. Research and credit, which have proved of particular importance to communal farmers, including women, are victims of

GOZ budgetary shortfalls. ZASA investments in both areas have shown returns that merit increased expenditure in the future, although credit expansion will require the development of improved loan recovery mechanisms.

The impact of ZASA local currency funding can be illustrated with several examples:

- Small farmer, crop specific, and livestock research helped translate years of sophisticated research for commercial farmers into productive technologies for communal areas
- Communication radios helped improve information flow among field staff in communal and wildlife areas poorly served by roads, improving the effectiveness and efficiency of overstretched staff, and reducing transportation requirements
- Fishing coops became highly profitable organizations, substantially increasing the incomes of their members
- Cooperative credit made Z\$2 million increased the availability to smallholders of modern inputs through cooperative unions
- Grain marketing depots substantially increased smallholder access to markets and inputs, contributing to a dramatic increase in all marketed crops from communal areas
- Coffee processing equipment and storage facilities paid for themselves in the first year, helping promote significant expansion of coffee production, improving coffee quality, making possible higher producer prices, and increasing smallholder involvement and incomes
- Irrigation development contributed to national self-sufficiency in wheat
- Programs for improving management of communal livestock, wildlife, and land resources assisted in the development of workable resettlement models
- Education investments enabled the University of Zimbabwe to double agricultural enrollments, agricultural colleges to admit women for the first time, and students and extension staff to obtain practical on-farm training and experience

## **Overall Program Impact**

### **a. On GOZ budget**

While amounting to less than 5% of the GOZ average annual agricultural budget, ZASA helped ease budget constraints at a critical time in the nation's development, when deficits were running at 10-12% of GDP. ZASA specifically helped make up for budgetary shortfall in the face of dropping real wages and budgets, particularly with regard education and research, both of which have shown high returns to the agricultural sector. In doing so ZASA has added resources which had little if any inflationary impact; given the relatively high returns to the economy of ZASA funding, the program may even have played a modest deflationary role through increases in agricultural productivity.

### **b. On GOZ policies**

ZASA at the outset had a major impact on GOZ policies, helping bring about a major shift in resources from the commercial to smallholder agricultural sectors, and supporting GOZ efforts to realign overall policy priorities toward growth with equity. In retrospect, however, perhaps even more could have been done to help GOZ move from those policies of the early ZASA days on which the donor and GOZ concurred, to the policy changes needed to meet the changing circumstances and economic climate facing today's decision makers.

ZASA's policy impact to date, beyond facilitating the shift of emphasis to the smallholder, has been limited to the testing of innovative resettlement and resource management models, such as Model D in communal areas, and the fostering of constructive linkages between communal and commercial coffee and cotton producers. No provision was made to utilize ZASA to improve understanding of, or policies to improve, the status of women despite that fact that they are major participants in smallholder agriculture.

While ZASA, appropriately, was designed and implemented to support positive government policies, it was also charged with promoting constructive policy development and refinement.<sup>6</sup> In the context of the general economic deterioration of recent years, ZASA has had the opportunity to contribute positively to policy dialogue, but has not taken advantage of it. This is not unexpected given the reduction in funding levels which gave policy makers little reason to utilize ZASA's policy role effectively to address such issues as the development of new models for dealing with resource management problems, the allocation of foreign exchange, industrial protection, women's issues in agriculture, or exchange rate policy.

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<sup>6</sup> USAID, Zimbabwe Agricultural Sector Assistance, PAAD Authorization (613-0209), 9/23/82: 1, 7, 15, 28-30; Zimbabwe Agriculture Sector Assistance (ZASA) Program Amendment, (613-T-607), 8/9/88:3, 11-15, 21, 28, 50, 55,56.

### **c. On performance of the agricultural sector**

ZASA directly stimulated production, employment, and productivity gains in the commercial agricultural sector while also helping promote smallholder production with local currency development funding that ultimately resulted in major growth in the communal sector. ZASA-funded research helped farmers, large and small, to increase the productivity of their lands and livestock and reduce disease and pests. New marketing depots contributed to dramatic increases in marketed crops in communal areas. Irrigation development helped the nation become self-sufficient in wheat. Training, market, and credit support helped communal cotton growers become the largest producers in Zimbabwe. Distribution of benefits in the communal sector, however, still has not been adequately addressed.

More specifically, the overall impact of ZASA funding, through both its CIP and local currency components, can be seen in the coffee industry. Analysis of that sub-sector reveals that the foreign exchange requirements of the commercial coffee industry have run about one-third of total production costs; that each CIP dollar invested the coffee industry can return between \$8 and \$12 of increased foreign exchange earnings; that Z\$8.7 million (US\$3.5 million) in ZASA funding was fully recouped in the first year alone through the increase in value of coffee produced; that communal areas have increased production by tenfold since Independence, earning approximately \$100,000 in additional income that can be directly related to ZASA inputs; that the quality of coffee produced has increased significantly, more than doubling among smallholders; and that these increases have been achieved with active extension and technical support from the commercial farming sector, which also benefitted substantially from the ZASA investments.

Furthermore, future CIP investments in support of improved technologies can have an important impact on production, smallholder incomes, and national accounts. For example, the coffee data show that imported drip irrigation technology for coffee producers could lead to at least a 15% increase in foreign exchange earnings, and the creation of 1000-2000 new jobs, and that generated local currency, if earmarked for the irrigation of communal areas, could result in an increase in communal area coffee earnings of approaching between 2 and 6 times current levels. While such impact cannot necessarily be replicated in all other agricultural sectors, due particularly to the significant foreign exchange requirements of the coffee industry, it is indicative of the overall impact of the impact of any potential future ZASA-type investments.

### **d. On productivity of smallholder farmers**

ZASA funded small farmer, crop specific, and livestock research helped translate years of sophisticated research for commercial farmers into productive technologies for communal areas that helped increase production dramatically in communal areas. Some of these gains were clearly due to increased areas under cultivation, increased yields resulting from the adoption of modern inputs and better technologies. While ZASA played a part in each of these, its contribution was one of many provided by GOZ and other donors. This having been said, it is clear that ZASA-funded grain marketing depots, seasonal credit, and small farmer research substantially increased smallholder

access to markets, inputs, and new technologies, contributing to a dramatic increase in all marketed crops from communal areas. For example:

- Cotton training programs and marketing depots contributed to a three-fold increase in smallholder production between 1982 and 1988, enabling communal farmers to overtake commercial farmers as the nation's major cotton producers in only four years.
- Communal area maize production more than doubled between 1980 and 1985, in part as a result of an expanded network of ZASA-funded marketing depots

#### **e. On welfare of smallholder farmers**

While production and productivity in the smallholder sector have risen dramatically in the past 10 years, real wages, incomes, and nutritional status have to dropped in recent years. ZASA helped ameliorate these trends through the provision of marketing, inputs, credit, technical know-how, and irrigation in communal areas. This has contributed to important increases in communal area production (mentioned above) of cotton, maize, and a variety of cash crops that together have helped raise smallholder incomes. The benefits of this growth, however, have been concentrated in higher rainfall area, and among only a portion of the households in those areas, leaving out many communal area farmers in Natural Regions 3, 4, and 5. While gains have been made, they are threatened by macro-economic changes both inside and outside Zimbabwe. If ZASA made a difference within a climate of control, rather than liberalization, then the impact of similar commodity import programs in a more open economic setting could have a significant multiplier, resulting in greater gains than ever from future investments.

Welfare of smallholders, however, must be a major concern in the future, particularly considering government plans to liberalize trade and exchange rates. While these actions are essential for a healthy economy, they will initially have a detrimental effect on substance wage earners and small farmers, including the large number of female-headed households, due to their inflationary impact. Therefore, labor intensive investments during the first years of a structural adjustment program will be needed to help alleviate the negative impacts on employment and real incomes that would come initially from liberalization. It will thus be essential for GOZ to have programs in place, such as ZASA, which channel benefits from policy changes into programs directly benefitting the rural poor.

#### **f. On women**

While women are the backbone of the rural agricultural sector and indirectly benefit from all investments to relieve the constraints which ZASA sought to address, they receive proportionately less benefit from such investments than men. Marketing, credit, inputs, and extension are still more accessible to men than women. ZASA has paved the way, however, for educating and training women agriculturalists, providing the resources which enabled women to attend Zimbabwe's agricultural colleges for the first time. Although, inconceivably, women were not included in the original ZASA project objectives as specific beneficiaries, it is essential that they be targeted directly in any future programs.

#### **g. On private sector growth in agriculture**

The private commercial agricultural sector was the first to receive direct benefit from the ZASA program through the commodity import program. Access to equipment, including tractors, combines, critically needed spare parts, and other inputs from abroad had a direct and positive impact on production, productivity, and incomes. Tractors brought new land under cultivation and improved productivity of existing land. Combines contributed significantly to wheat self-sufficiency. Spare parts brought broken-down equipment back into productive use, easing the problems associated with an aging tractor and vehicle pool. US dollars expended were multiplied from 4-12 times through increased export earnings. Commercial farmers benefitted directly from many local currency programs, particularly the expansion of marketing board depots, irrigation, and coffee processing equipment. Commercial farmers and their organizations have devoted part of their increased incomes and human and financial resources to providing research, technical, logistical, training, and other types of assistance to neighboring communal farmers.

#### **h. On GOZ capacity to plan and implement future sectoral programs of a similar nature**

Since Independence GOZ capacity to plan and implement sectoral programs, particularly in support of the smallholder sector, has improved markedly. ZASA has played an important role in that growth process by providing useful experience to relatively unseasoned professional staff. The ZASA model left responsibility with Government yet provided for inter-ministerial and donor/government dialogue to enhance the decision-making process and to enable the testing of innovative solutions to difficult problems.

Both the ZASA-type CIP mechanism and its policy dialogue component were underutilized, however. In the future government could improve development performance by soliciting larger sums of CIP funding from donors for agricultural investment. It could also further strengthen this development tool by broadening the membership of the Working Group, improving monitoring and reporting systems, and obtaining access to experts inside or outside government to provide advice on specific projects and to evaluate proposals made by various ministries.

In conclusion, the ZASA program has had an impact beyond the dollars that have been invested. While constituting only a small part of the GOZ budget, ZASA has provided a higher marginal return than many other larger projects. It did this because the flexibility, efficiency, and capacity for timely response that characterized ZASA helped make its larger investments, to which ZASA contribute some part, significantly more productive. Thus ZASA helped bring up the average return for all agricultural development programs. More specifically, ZASA:

- Helped move projects forward that had been on the drawing boards for a long time, but had not been funded because they were considered too small or too risky

- Funded unconventional or innovative problem-solving, such as the creative use of local currency to arrange a barter for improved coffee equipment from a third country
- Provided the missing resources needed to complete projects hurt by inflation, cost overruns, or other unforeseen problems that left key tasks undone, tasks which would have been difficult to fund through conventional channels; ZASA minimized the waste associated with uncompleted programs
- Improved the morale and productivity of professional staff by funding short courses and study tours
- Enabled timely response to emergencies with provision of funds, equipment, supplies, and/or outside expertise, such as locust control and veterinary toxicology

## **Lessons Learned**

Looking to the future, in designing programs modeled on ZASA, planners and policy makers must not be constrained in their thinking by either previous experience or conventional wisdom. The ZASA model is a powerful tool for agricultural development in Zimbabwe and full advantage should be taken of it; future programs can constructively build upon the CIP model, its local currency program, and its potential for backing up policy debate with fundable projects. They must be adequately funded and benefit from the participation of policy makers who can use program flexibility to adapt to changing circumstances and wrestle with complex policy issues through a learning process built on the pilot implementation of innovative ideas rather than theoretical debate.

In view of ZASA's considerable contributions to the communal and commercial agricultural sectors, of new pressures on the Zimbabwe economy, and of a new openness on the part of GOZ to engage in policy dialogue around economic and trade liberalization, programs like ZASA may be even more relevant to today's circumstances than ever before.

Although ZASA's day is over, should USAID or other donors consider taking advantage of this powerful tool, the following lessons stand out:

- Provide new and/or expanded programs for ZASA-type CIP and local currency funding for agricultural development targeted at the smallholder
- Make funding available at higher and more consistent levels than provided under ZASA, to meet increased need and improved government absorptive capacity, and to attract the participation of senior policy makers; \$10 million per year seems an appropriate minimum.
- Promote active dialogue around agricultural policies that can appropriately be implemented and tested by sub-project funding

- **Strengthen the mandate and composition of the Working Group, broadening participation of the key technical ministries, agencies, relevant farmers organizations, and appropriate agricultural NGOs, and reducing MFEPD dominance. Ensure the participation of senior level women.**
- **Improve reporting, monitoring, and evaluation procedures for both commodity import and local currency allocations of future programs following the ZASA model**
- **Locate the program within the planning arm of MFEPD**
- **Resolve distortions associated with an overvalued exchange rate**

## **SECTION B**

### **Commercial Coffee Production, Smallholders, and the Impact of ZASA:**

#### **The Linkages between Commodity Imports and Local Currency Support**

#### **A CASE STUDY**

#### **Background and Context**

The coffee industry in Zimbabwe offers a useful case study of the application of ZASA funds, illustrating the linkages between both the CIP and local currency programs. This is particularly true since both commercial and smallholder production are involved, thus enabling analysis tracing the initial investment of CIP funds in the commercial sector through to the final impact of the Z\$7 million ZASA investment in local currency funds upon production and incomes in the smallholder sector. The case study is also useful because of the complementary linkages between commercial and smallholder coffee producers that include exchange of information, extension support, and the development of irrigation, credit, input supply, and research that draws on the strengths of the commercial coffee producer and uses those strengths to foster the growth and development of communal area production.

Commercial coffee production in Zimbabwe requires substantial capital and technology. Tractors, sprayers, irrigation equipment, and chemicals are essential to the industry in Zimbabwe, which is one of the most productive and high quality coffee producing nations in the world. Coffee growing generates considerable on-farm employment as well as post-harvest processing. CIP funds made available broadly to the commercial agricultural sector contributed to alleviating commodity constraints that otherwise would have inhibited expansion of coffee production and exports.

In addition, with the joint support of AGRITEX and commercial farmers, an emerging smallholder coffee production sector has been developing since independence. While labor rather than capital intensive, it has benefitted directly from both foreign and local currency support. All growers need foreign exchange for pesticides, herbicides, fungicides, and fertilizer.

Both commercial and communal coffee production have been stimulated by local currency funds which have been used to build needed coffee storage capacity and to provide modern computerized coffee selection and processing equipment. These have helped increase the volume and value of both commercially and communally grown coffee, increasing incomes and employment and generating considerable foreign exchange for the country.

This case study will review these interrelationships systematically, beginning with foreign exchange requirements that can be alleviated by CIP programs, progressing through the utilization of generated local currency to increase production, and concluding with the ultimate impact on communal area producers and laborers. Drawing on production and earnings data from the Grain Marketing Board, Coffee Growers'

Association, and individual farmers interviewed in both the communal and commercial sectors, this analysis will:<sup>7</sup>

1. Quantify the foreign exchange requirements (both for variable costs and capital) for Zimbabwe's coffee production that are addressed by ZASA-type CIP programs
2. Estimate the foreign exchange returns from each dollar of foreign exchange invested in the coffee sector, comparing earnings from both existing and improved irrigation systems requiring foreign exchange
3. Estimate specific ZASA contributions to the increased value of coffee exports, to incomes and to employment
4. Quantify the ZASA contribution to increasing the value of coffee produced by the communal sector
5. Compare the growth of coffee production and quality in commercial and communal areas since Independence, including increases attributable to ZASA support
6. Project the increases in earnings from expanded communal area coffee production both through the expansion of area under cultivation and the implementation of irrigation programs in a representative communal area
7. Estimate the direct and indirect benefits to the communal sector from CIP funding to the commercial coffee sector

Through this analysis it is evident that the foreign exchange requirements of the commercial coffee industry run about one-third of total production costs, that for each CIP dollar invested the coffee industry can return between \$8 and \$12 of increased foreign exchange earnings; that Z\$8.7 million (US\$3.5 million) in ZASA funding was fully recouped in the first year through the increase in value alone of coffee produced; that communal areas have increased production by tenfold since Independence, earning approximately \$100,000 in additional income directly related to ZASA inputs; that quality of coffee produced has increased significantly, more than doubling among smallholders; and that these increases have been achieved with active extension and technical support from the commercial farming sector, which also benefitted substantially from ZASA investment.

Furthermore, the data show that future CIP investments in support of imported drip irrigation technology could lead to at least a 15% increase in foreign exchange earnings, the creation of 1000-2000 new jobs and that generated local currency, if earmarked for the irrigation of communal areas, could result in an increase in communal area coffee earnings of between 2 and 6 times current levels. While these impacts cannot necessarily be replicated in all other agricultural sectors, due particularly to the significant foreign exchange requirements of the coffee industry, they are indicative of the

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<sup>7</sup> **Note:** Data source for this section: Coffee Growers Association, farm interviews with commercial and communal coffee growers, Eastern Highlands/Honde Valley, Oct.-Dec. 1990. Special thanks to M. McNamara for both taking the team through the area and providing valuable statistical data and economic analysis.

overall impact of both the CIP and local currency components of the ZASA program and the projected return from any potential future ZASA-type investments.

## 1. Foreign Exchange Component of Variable and Capital Costs

Commercial coffee production is a productive earner of foreign exchange in Zimbabwe, generating from Z\$40 to Z\$60 million per year, or 2% of the nation's total export earnings in 1987.<sup>8</sup> In addition it is one of the most efficient producers of hard currency, returning at least \$8 of foreign exchange for each \$1 invested, double that for the agricultural sector as a whole. In return it requires critical commodities that depend on foreign exchange. The following tables summarize the foreign exchange component of both variable and capital costs:

**Table B.1**

**Coffee Production: Foreign Currency Component to Total Variable Costs (Z\$) \***

Input	Cost/ha.Yr.	ForEx Cost/ha.Yr.	ForEx as % of Cost/ha.Yr.
Fuel	363	124	34%
Pesticides	150	68	45%
Fungicides	738	130	18%
Herbicides	67	31	45%
Fertilizer	904	254	28%
Puberty R&M	60	18	30%
Subtotal/ha.	2282	626	27%#
TOTAL: 84 ha.	Z\$191,729	52,561	27%#

**Table B.2**

**Coffee Production: Foreign Currency Component to Capital Equipment Costs\* (In Z\$)**

Equipment	Total Cost	Deprec. in Yrs.	Cost/year	Forex/year	Forex Component
Tractors	350,000	10	35,000	17,500	50%
Mistblowers	27,000	3	9,000	1,350	15%
Pickup Truck	30,000	10	3,000	1,500	50%
Motorbike	5,000	10	500	250	50%
TOTAL	412,000	Avg: 9 yrs.	47,500	20,600	43%#

Source: Coffee Growers' Association

\* Based on a representative 84 ha. farm with 12 ha. of new coffee, 12 ha. of flycrop, 48 ha. of high production young coffee, and 12 ha. old coffee at end of rotation.

# Weighted average

<sup>8</sup> Report Zimbabwe, Federal Statistical Office & Statistical Office of the European Communities, Weisbaden and Luxembourg, 1990: 86.

As the data indicate, the foreign exchange component of fuel, pesticides, fungicides, herbicides, fertilizer, and pulper R&M averages 27%. For capital costs, including tractors, mistblowers, and vehicles the foreign exchange requirement is 43% of costs. For a representative 84 ha. coffee farm--with 48 ha. of high production young coffee plus 12 ha. each of new coffee, flycrop, and old coffee at the end of rotation--this represents a total of Z\$73,161 annually, or 31% of an annual Z\$233,000 farm budget for equipment and inputs.

## 2. Foreign Exchange Returns from Foreign Exchange Investments: Comparing Existing and Imported Irrigation Systems

While foreign exchange requirements for commercial coffee production are high relative to some other agricultural commodities, the returns in foreign exchange earnings are substantial. The following table summarizes the total estimated hard currency requirements and earnings per hectare per year, and compares earnings for both imported solid state drip irrigation and existing piddle irrigation systems.

**Table B.3**

**Coffee Production:  
Foreign Currency Costs for Irrigation  
Solid State Drip vs. Existing Piddle Systems  
(in Z\$ except as noted ; US\$1 = Z\$ 2.45)**

	Improved Solid State Drip	Existing Dragline Piddle System
Irrig. Capital cost/ha.	Z\$ 8,000	Z\$ 800
ForEx/ha.	4,300	320
ForEx/ha/yr. (@7 yrs. dep.)	614	46
Subtotal Forex/yr. for 84 ha.	51,600	3,840
Equip't. Costs " " "	20,600	20,600
Variable Costs " " "	52,561	52,561
Total ForEx/yr. (Z\$) " " "	Z\$ 124,761	Z\$ 77,001
Total ForEx/yr. (US\$)	US\$ 49,031	US\$ 30,261
ForEx input/ha	\$584	\$360
ForEx Earnings*	\$422,335	\$366,958
Earnings Ratio#	1: 8.6	1: 12
Earnings/ha.	US\$ 5,026	US\$ 4,357

Source: Coffee Growers' Association

\* Based on gross export revenues of Z\$1,075,000 on 84 ha. farm, Tables D.1 & 2, above

# Ratio of foreign exchange inputs to foreign exchange earnings

### Existing Dragline Irrigation

Most commercial farms use dragline "piddle" irrigation systems which are relatively low cost, with equipment averaging only Z\$800/ha. compared to Z\$8000/ha. for imported solid state systems. An 84 ha. irrigated commercial coffee farm using the existing system currently requires about Z\$77,000 (US\$30,000) in foreign exchange per year, or Z\$900/ha./yr. (US\$360). From this investment a total of Z\$931,000 (US\$366,000) in hard currency is generated, or over US\$4000/ha., representing a ratio of foreign exchange earnings to investment of 12:1.

## Imported Solid State Drip Irrigation

While imported solid state drip irrigation equipment costs more than dragline systems, substantial increases in yield per hectare can be realized. Furthermore, the Coffee Growers' Association reports that complete and guaranteed drip irrigation systems can be imported into Zimbabwe for less than the foreign exchange costs of the raw materials for locally producing similar but less efficient irrigation systems. Due to the capital costs of solid state drip systems the foreign exchange earnings ratio per hectare drops from 12:1 to 8.6:1. Increased efficiency, however, results in earnings per hectare that rise 15% to just over US\$5000 per year. A foreign exchange investment of Z\$12.8 million (US\$5 million), for example, would irrigate approximately 2500 ha., resulting in an increase in yield of 0.5 tons/ha., or a total of 1280 tons. The value of this increased production would be Z\$5.25 million per year, providing a pay-back in approximately 2.5 years.

### 3. ZASA Contributions to the Increased Value of Coffee Exports

The two major coffee projects funded by ZASA local currency funds included Z\$2 million for additional coffee storage capacity at Chipenge and Z\$6.7 million for the purchase and installation of modern coffee milling equipment at Mutare, both serving commercial and communal producers in the Eastern Highlands. The milling equipment, obtained from Brazil through a barter exchange arrangement, replaced aging and substandard equipment with high-tech computerized color grading equipment. This has enabled more sophisticated grading of coffee, resulting in an increase in marketable high grade coffee and increased crop value. The swap transaction which made this possible was innovatively financed through the exchange of maize for equipment, effectively making it possible to purchase sophisticated imported equipment with local currency instead of with scarce foreign exchange, which otherwise might have had to be obtained through a CIP-type program.

**Table B.4**

**Coffee Production: Deliveries from Farmers--Initial Value of 1989/90 Crop**  
1989/90 Deliveries from farmers (US\$1 = Z\$ 2.45)

Grade of Coffee	Tons	Initial Value Z\$	Avg./ton Z\$	Initial Value US\$	Avg./ton US\$	% of Total
High grade	2,079	7,433,000	3,575	3,047,000	1,459	14%
Low grade	12,358	38,154,000	3,088	15,643,000	1,280	86%
<b>Subtotal</b>	<b>14,435</b>	<b>45,587,000</b>	<b>3,158</b>	<b>18,691,000</b>	<b>1,289</b>	<b>100%</b>
Supplement pd.	709	2,905,000	4,100	1,142,000	1,673	5%
<b>TOTAL Initial Value</b>	<b>14,435</b>	<b>Z\$48,492,000</b>	<b>3,359</b>	<b>US\$19,832,000</b>	<b>1,371</b>	

Source: Coffee Growers' Association

**Table B.5**

**Coffee Production: ZASA Contribution to Increased Production--Value of Coffee Exports through Improved Grading**  
 1989/90 Exports of Crop (US\$1 = Z\$ 2.45)

Grade of Coffee	Tons	Export Value Z\$	Avg/ton	Export Value US\$	Avg/ton	% of Total
High grade	8,845	40,258,400	4,552	16,432,000	1,858	64%
Lower grade	4,905	16,907,450	3,447	6,901,000	1,407	36%
<b>TOTAL Export Value</b>	<b>13,750</b>	<b>Z\$57,165,850</b>	<b>4.158</b>	<b>US\$ 23,333,000*</b>	<b>1,697</b>	<b>100%</b>
Increase in higher grades due to ZASA machinery#		6,7656 tons				50%
Increase from Initial Value to Export Value after Regrading		Z\$8,976,923	1,327	US\$ 3,501,000	518	16%

Source: Coffee Growers' Association

\* Export value Z\$ 57 million

# Difference between high grades before and after regrading with new color sorting machinery (8845 - 2079 = 6766 tons)

ZASA-funded computerized sorting equipment more than paid for itself during its first year of operation. Preliminary processing and grading of deliveries from farmers were particularly poorly handled by GMB resulting in only 14% of the crop being graded at the higher levels. Supplements of Z\$4100/ton were paid on only 2,079 tons of coffee for a total initial bonus payment to farmers of Z\$2.9 million. After processing and color sorting with the new ZASA-funded machinery and sale on the world market, an additional 6766 tons of the highest grades of coffee were able to be selected and sold at premium prices. This resulted in an increase in value of the coffee crop of Z\$8.98 million, directly attributable to the ZASA-funded machinery. Thus, the increased value of the 1989/90 crop alone substantially exceeded the Z\$ 6.7 million total cost of the installed new equipment, allowing further bonuses to be paid directly to producers during the first year of operation, in spite of both poor initial grading by GMB and a significant drop in world coffee prices that would otherwise have seriously hurt producers. Savings in future years will be lower assuming satisfactory processing, but nonetheless will continue to be substantial.

#### **4. ZASA Contribution to Increased Value of Coffee Exports by Smallholders**

While communal sector coffee production has risen from virtually nothing at Independence to a total of 234 tons in 1989/90, it still represents only 2% of the nation's production. Valued at almost Z\$1 million in 1989/90, it provided an average of Z\$377 to each of the 2500 smallholder producers. As the following table indicates, the total value of the upgrading paid to smallholders and due directly to the ZASA machinery was Z\$223,000 (US\$94,000), an increase in value of almost Z\$1000/ton, or an average of Z\$90 per family. This is an increase of one-third more than the initial value of the crop.

**Table B.6**

**Coffee Production: ZASA Contribution to Increased Value of Coffee Exports 1989/90--Impact on Communal Sector\***

Coffee delivered to GMB	234 tons	
No. of producing households	250	
Avg. delivery price/ton	Z\$ 3,069	US\$ 1,295
Total initial value of crop	717,946	302,982
Avg. export price after sorting/t.	4,021	1,697
Total crop value after regrade	940,942	397,089
Value added by upgrading	Z\$ 222,996	US\$ 94,100
Value added per household	Z\$ 89.20	US\$ 37.64

Source: Coffee Growers' Association

\* Includes small-scale commercial production

**5. Production and Quality Growth for Commercial and Communal Production**

In the year following independence total coffee production stood at under 5000 tons valued at Z\$11 million. Virtually all of this came from commercial farms with communal area production totalling an almost negligible 9 tons. By the following year, 1982/83, commercial production had risen by 40% to almost 7000 tons while communal area production had risen fourfold to 36 tons. Of total production, 64% of the commercial coffee was graded as high quality while only 18% of that produced by smallholders was of that standard.

**Table B.7**

**Coffee Production: Production and Quality Comparisons: Communal and Commercial Sectors**

Production	81/82	82/83	83/84	84/85	85/86	86/87	87/88	88/89	89/90
Commercial (t)	4,894	6,870	9,675	10,572	11,142	13,089	11,426	9297	14201
% incr. from 81/82	-	40%	98%	116%	128%	167%	133%	90%	190%
% high quality	73%	68%	47%	47%	40%	49%	35%	68%	na
Communal* (t)	9	36	54	160	59	68	107	92	234
% incr. (cum.)	-	301%	504%	1674%	555%	655%	1088%	921%	2497%
% high quality	31%	18%	6%	8%	37%	49%	35%	71%	na
Earnings Z\$	16,000	59,000	102,000	327,000	230,000	310,000	361,000	457,000	959,000
Total crop (t)	4,903	6,906	9,729	10,732	11,201	13,157	11,533	9,389	14,435
Price/m. ton (avg.)	Z\$2,243	2,099	2,096	3,214	4,615	5,594	3,408	4,889	3,949
Total crop value	Z\$11 mill.	14.5 mill.	20.4 mill.	34.5 mill.	51.7 mill.	73.6 mill.	39.3 mill.	45.9 mill.	57 mill.

Source: Coffee Growers' Association

\* Includes small-scale commercial production

By the end of the decade total production had risen to 14,000 tons, almost triple the post-independence figure, with a value pegged at Z\$57 million, despite a major drop in world prices. On commercial farms high quality coffee had recovered from a mid-decade slump and now stood at just under two-thirds of all production. By comparison smallholder coffee production had risen to 234 tons, or 6.5 times 1982/83 levels, while quality had continued to rise, equalling or exceeding that on commercial farms.

Commercial farmers interviewed during the evaluation predicted that smallholder production would continue to rise in both quantity and quality and over time would begin to have a significant impact on the overall quality and value of Zimbabwe's coffee exports, helping to retain the country's place among the highest quality coffee producers in the world, and helping guarantee Zimbabwe a secure position at the upper end of the international market with its high prices. ZASA-funded storage, processing, and sorting equipment thus helped enable an overall 24% increase in earnings during the 1989/90 season despite a 20% drop in price, and helped protect the country from a worsening world price profile.

## 6. Projected Increase in Earnings from Communal Area Irrigation

The most significant deterrent to increasing both the quantity and quality of smallholder coffee production is the lack of irrigation. Through an intensive extension program initiated by AGRITEX and ADA and supported by adjoining commercial farmers, the Honde Valley in the Eastern Highlands has become the most productive smallholder coffee area in Zimbabwe. There both production and quality have increased dramatically during the past decade. Plots, however, are still small and production falls below optimum levels largely because of lack of reliable water supplies, despite two large rivers which carry enough water throughout the year for extensive irrigation. Commercial coffee growers working with smallholders under a collaborative extension program estimate that average yields per hectare could be at least doubled with irrigation, the quality of coffee harvested improved, and the percentage losses of young plants in new plantations be significantly reduced.

**Table B.8**

**Coffee Production:  
Communal Area/Honde Valley:  
Comparative Income between  
Irrigated & Non-Irrigated Land**

	Present system: Non-irrigated		Proposed system: Irrigated	
	Current acres	Expanded	Current acres	Expanded
Area in coffee (ha.)	220	720	220	720
Yield (tons)	230	753	460	1505
Yield/ha. (tons/ha.)	1.05	1.05	2.1	2.1
Price/ton (Z\$)	Z\$ 4,100	Z\$ 4,100	Z\$ 4,100	Z\$ 4,100
Revenue (Z\$)	943,000	3,087,000	1,885,000	6,172,000
Income/family (Z\$)	Z\$ 377	Z\$ 1,235	Z\$ 754	Z\$ 2,469

Source: Coffee Growers' Association

The smallholder production from the valley's 220 ha. now in coffee is approximately 230 tons, or just over 1 ton/ha., yielding revenues of Z\$ 943,000 or about Z\$377/family/year. With irrigation, the same area could yield 460 tons of coffee or just over 2 tons/ha., or \$754/family/year. As new land is prepared for coffee, it is estimated that the total area producing coffee could reach 720 ha. in the near future. If coffee operations were irrigated, coffee revenues to the valley would reach Z\$6.2 million, or Z\$2500 per family per year, almost seven times current levels.

## 7. Direct and Indirect Benefits to the Communal Sector from Future CIP Funding to the Commercial Sector

Commercial coffee production needs foreign exchange. Increased access to hard currency can enable installation of imported drip irrigation systems that can increase both production and foreign exchange earnings by over \$8 for each \$1 invested, boost earnings per hectare from Z\$4400 to Z\$5000. A US\$5 million CIP fund earmarked for the coffee sector would thus yield between Z\$43 million and \$60 million in hard currency to the national economy. In addition, if the Z\$12.8 million in local currency generated by US\$5 million CIP foreign currency fund were invested in irrigation in a communal area such as the Honde Valley, production and local incomes could be increased two- to six-fold, bringing an additional Z\$1 to 5 million into the smallholder economy each year. Furthermore, the commercial Coffee Growers' Association has indicated that its members and staff would be ready to provide a low cost program of supplementary extension support to smallholders as part of a comprehensive communal area coffee irrigation and development initiative, further strengthening the direct and indirect linkages between the communal and commercial sectors facilitated by the ZASA program.

Communal areas adjoining commercial farms would also benefit from increased employment derived from the projected growth in yields on those farms of a half ton per hectare. The following table indicates how a US\$5 million CIP investment, providing improved imported drip irrigation technology to 2500 acres, would increase yields by 1280 tons:

**Table B.9**

**Coffee Production:  
Annual Employment Benefits to  
Communal Areas from Increased  
Commercial Yields (Drip Irrigation)\***

New area under imported drippers	2500 ha.
Resulting increase in yield/year	0.5 tons/ha.
Total increase in yield/yr.	1280 tons
Value of increased yield/yr.	Z\$ 5.25 mill.
No. new pickers needed/season	1800
Wage payments to new pickers/yr.	Z\$ 538,000

Source: Coffee Growers' Association

\* Based on US\$5 million investment allocated for imported drip irrigation technology

From the increased yields of 1280 tons, the value added would be approximately Z\$5.25 million. To harvest and process this crop an additional 1800 pickers would be required during the harvesting season. Their wages, of about Z\$538,000, would provide an additional income which would supplement current communal sector coffee earnings by over 50% (based on 1990 smallholder coffee earnings of Z\$960,000). With ZASA local currency funds invested in the irrigation of communal lands, family incomes could potentially top Z\$3000, a figure almost ten times current levels. While such increases, of course, depend on optimal circumstances, they are indicative of the power of the ZASA model when applied within a single agricultural sub-sector where foreign exchange requirements and earnings are both relatively high. Because women are actively involved in coffee production these investments would also have a positive residual impact on female participation in agricultural production.

## **Conclusions**

This case study reveals the power of the ZASA CIP and Local Currency model in an economy with a shortage of foreign exchange, an important export market, a productive commercial agricultural sector that uses foreign exchange efficiently, and a viable smallholder structure with absorptive capacity for local currency investments. In Zimbabwe this applies not only to coffee production, but also to cotton, tobacco, and livestock. From this analysis it is evident that:

- The Z\$8.7 million (US\$3.5 million) in ZASA funding was fully recouped in the first year through an increase in the value of coffee produced alone
- For each CIP dollar invested the coffee industry can return between \$8 and \$12 of increased foreign exchange earnings since the foreign exchange requirements of the commercial coffee industry run about one-third of total production costs and world coffee prices are high for the quality of coffee that Zimbabwe produces
- While the bulk of coffee production remains on commercial farms, communal areas have increased production by ten-fold since independence, earning approximately Z\$223,000 in additional income directly related to ZASA inputs, or Z\$90 per household per yr.
- ZASA-funded equipment has contributed directly to a significant increase in the quality of coffee marketed by both commercial and communal producers, with quality more than doubling among smallholders
- These increases were achieved with active extension and technical support from the commercial farming sector, which also benefitted substantially from the ZASA investments

These impacts, while significant, cannot necessarily be replicated in all other agricultural sectors, particularly because of the significant foreign exchange requirements of the coffee industry. Nevertheless, they are suggestive of the overall impact of both the CIP and local currency components of the ZASA program and indicate the potential returns achievable from any future ZASA-type investments.

## **Lessons Learned**

The data and analysis indicate that, should any future CIP investments be contemplated by USAID or other donors in support of coffee production, the funding of imported drip irrigation technology could lead to at least a 15% increase in foreign exchange earnings, and the creation of 1000-2000 new jobs. Furthermore, the local currency generated, if earmarked for the irrigation of communal areas, could result in an increase in communal area coffee earnings of between 2 and 6 times current levels. Thus, if any future funding is made available, through ZASA or a similar CIP-like program, to further develop both the commercial and communal coffee sub-sectors, consideration should be given to:

- **The allocation of new CIP funding to enable import of improved drip irrigation technology**
- **Provision of local currency funding to expand communal area irrigation for coffee, including appropriate drip technology**
- **Strengthening linkages to increase the flow of information, technology, and extension support between commercial and communal coffee growers**
- **Utilization of private sector mechanisms to enhance and complement AGRITEX and ADA support to smallholders**
- **Enhancement of the productive role that female farmers can play in smallholder coffee production both as family members and as heads of households**

**INTRODUCTION TO ZIMBABWE  
AND THE ZASA PROGRAM****1. Country Context**

At Independence, the new government of Zimbabwe (GOZ) started the reconstruction and the restructuring of a war-torn society with a bankrupt treasury. Yet during the first decade of independence GOZ, in partnership with donors that included USAID, made remarkable strides in agriculture, health, and education. These achievements were built on a national foundation of strong manufacturing and commercial agriculture sectors as well as a combination of the ending of sanctions, good rainfall, favorable commodity prices for mineral exports (particularly gold and silver), and substantial increases in real wages. Together, these led to a 25% increase in real GDP between 1979 and 1982.<sup>9</sup>

This growth was short-lived, however, and, as a consequence of drought, depressed mineral prices and global recession, real GDP rose by only 1.6% in 1983 and, in the following year, fell by 1.8%. External debt service, which had been 2.6% of export earnings in 1980, rose to 30% in 1983 and to 33% by 1987. Constant foreign exchange shortages and declining domestic demand due to falling real wages led to an average GDP growth rate of 3.3% annually in the period between 1980 and 1988, less than the population growth rate of 3.5% between 1970 and 1989.<sup>10</sup>

With a national commitment to "growth with equity," the new government attempted to expand existing production and to maintain existing jobs while redistributing benefits through mandatory increases in the minimum wage and increased job security. At the same time official expenditure was directed at expanding services to include the black population largely unserved before Independence. Its goal was to redress, in part, the land shortage for the rural poor through resettlement, and to promote small farmer production and rural incomes through favorable prices and better access to inputs and product markets in communal areas .

Significant new resources were channeled to the health and education sectors, with 5-7% of GOZ's annual budget committed to health and about 20% to education. The result of these investments was dramatic improvement in health, literacy, and nutrition. Infant deaths, for example, dropped to 80 per thousand in 1985, down from 86 five years earlier; there were 2.5 times as many children in school as a decade earlier; and literacy climbed to 74%, up from 69% in 1980.<sup>11</sup>

The nation had not started its development from scratch with Independence, however. In the mid-sixties Zimbabwe, then Southern Rhodesia, was unique among African countries in the level of diversification and development of its agricultural, commercial and mining infrastructure. Approximately one-third to the adult population

<sup>9</sup> World Bank, Discussion Paper., World Bank Agricultural Sector Memorandum, Policy Options for Zimbabwe; Harare, Oct. 26, 1990.

<sup>10</sup> Ibid; and M. Rukuni, "The Development of Zimbabwe's Agriculture: 1890-1990;" Univ. of Zimbabwe, Dept. of Ag. Econ. & Extension, September 1990

<sup>11</sup> EEC & ODA, Eurostat, Federal Statistics Office, "Report Zimbabwe 1990, Luxembourg

was employed in the formal sector. The Unilateral Declaration of Independence (UDI) in 1965 and the sanctions which followed initially led to greater diversification of the agricultural and manufacturing sectors to attain self-sufficiency in those products which could no longer be obtained from abroad; for example, the number of manufactured products produced in the country rose from 600 to over 6000. However, this growth was attained at a high cost; the nation's capital stock was run down in order to prolong the war; furthermore, real GNP fell by 1% a year on average between 1975 and 1979, leaving the economy in a shambles by the time the Lancaster House agreement, which ended the war and established the rules for post-Independence development, was signed.<sup>12</sup>

UDI had put in place a system of state controls on the economy in order to encourage self-sufficiency in the face of sanctions; these included fixed producer and consumer prices, strict controls on possession and transactions in foreign exchange, and limitations on exports of certain products. Although sanctions were removed at Independence, a number of the same or similar controls were left in place by the new government in its attempt to maintain the industrial sector and its jobs. To do so, it allocated vast amounts of scarce foreign currency to high cost firms without, until 1990, beginning to demand competitiveness as trade barriers were reduced. This has kept intact a high-cost and inflation-creating industrial sector and has severely limited the policy options open to government with respect to other sectors, particularly agriculture.

The combination of a diversified economy, a strong commercial agricultural sector, and a national commitment to redistributive measures produced real gains up until 1982. Thereafter, in the face of a rapidly softening labor market and cash crises in many firms, the policy led to falling real wages, making the minimum wage effectively the maximum.

In the formal sector, minimum wage policy raised real wages until the recession of 1983-85. Higher minimum wages and laws attempting to provide job security had the effect of encouraging employers, particularly in agriculture where demand for labor is seasonal, to change from a workforce composed largely of permanent workers to one increasingly composed of casual labor. This was drawn from the increasingly large pool of the unemployed, who constituted 30% of the population by 1988, up from 11% in 1982. The minimum wage for agricultural and domestic workers had been, in real terms, Z\$30 in 1980, rose to Z\$45 in 1982, fell to Z\$32 in 1983, and had regained only part of these losses by 1988 when it reached Z\$37.<sup>13</sup>

Per capita GDP dropped during the war, rose after Independence, and has since stagnated. GDP in 1980 dollars, which had been Z\$539 in 1975 and fell during the last years of the war, reached a post-Independence peak of Z\$472 in 1982. In 1989 it was estimated to be Z\$471, 13% below 1975 levels, as growth in GDP failed to keep pace with population growth.<sup>14</sup>

The tension between ideals and reality, between bold programs and harsh economic constraints has led Zimbabwe, as it enters the last decade of the century, to embark on serious and widespread dialogue about trade and economic liberalization.

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<sup>12</sup> Rukuni, op. cit.

<sup>13</sup> EEC, op. cit.

<sup>14</sup> EEC, op. cit.

There is increasing recognition at many levels of government that foreign currency controls, an overvalued exchange rate and administered prices both at the producer and consumer level have impeded the economy's ability to grow. Shortages at official prices of all types of inputs, from cement to fertilizer, have become widespread, the result of setting prices below a market-clearing level in an unsuccessful attempt to hold down inflation.

Zimbabwe, having emerged from a long and costly war; having brought about a fundamental reorientation of its society and economy; and having made major advances in health, education, agricultural production, and exports, enters the 1990s with valuable experience and renewed commitment to seek answers to its economic and social problems.

## **2. The Agricultural Sector**

In the context of severe pressures on the national economy, of Zimbabwe's commitment to increasing the productivity of the commercial sector, and of promoting widespread distribution of benefits, the role of agriculture has been especially important. Policies regarding agriculture have paralleled those of the economy as a whole.

Zimbabwe's agricultural sector is one of the most efficient and productive in sub-Saharan Africa. In most years, Zimbabwe is self-sufficient in food production and also exports substantial amounts of tobacco, cotton, sugar, maize, meat, coffee and tea. Agricultural products account for between 30% and 50% of export revenues, while consuming only about 10% of imports. The sector is more highly diversified than the agricultural sectors of many other sub-Saharan countries, in part because of the need for self-sufficiency during the years of sanctions. At Independence, agriculture accounted for 14% of GDP, while 70% of the population depends on agriculture for subsistence. Over two-thirds of all formal employment and one-fourth of total employment derives from the agricultural sector. The manufacturing sector, particularly the textile sub-sector, is heavily dependent on agriculture for its inputs.<sup>15</sup> (Table C.1, below)

Prior to Independence, the focus of government support was on the commercial agricultural sector. Subsequently, the orientation of research, extension, credit, marketing, input supply, land and water development, education and training was broadened substantially to include support for development and production in communal areas while maintaining basic support to commercial agriculture. Since Independence, the introduction of minimum wage laws and legislation prohibiting the firing of surplus workers, as well as an overvalued exchange rate and therefore low local costs of equipment, all favored labor displacing mechanization. This was so, particularly in grain production, and resulted in reduction of the number of permanent laborers on commercial farms. Thus, many workers faced the insecurity of becoming contract seasonal laborers. As a result, between 1975 and 1984, formal employment in the agricultural sector declined from 327,000 to 271,000, a drop of 17%.<sup>16</sup>

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<sup>15</sup> World Bank, op. cit.

<sup>16</sup> Rukuni, op. cit.

Immediately after Independence all farmers, both commercial and communal, responded to viable technological packages developed by past research efforts and favorable prices for maize and cotton by increasing production dramatically. Maize production increased three-fold and cotton six-fold, for example. In view of surpluses, particularly in maize, nominal prices established by the government were maintained but prices were allowed to fall in real terms through the impact of inflation and periodic devaluations. Communal farmers, lacking viable alternatives, remained in these crops, but, since the mid-1980s, commercial farmers increasingly have focused their attention on profitable markets for products such as flowers, fruit and vegetables air-freighted to Europe. They also have concentrated their efforts on other high-value crops such as soybeans, coffee and nuts such as macadamia. These crops were a response to the need recognized by the 1982 Chavanduka Commission on Agriculture which stressed the need to intensify agriculture, rather than promote extensive resettlement.

**Table C. 1**

**Agriculture in the Economy**

Indicators	Years 1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Gross Ag. Product at Factor Costs ( Z\$ mill.)	451	640	669	544	578	1038	1121	951	1309	1408
Gross Ag. Product as a Percent of Total Agricultural Employment (thousands)	14.0%	15.8%	14.4%	10.0%	13.2%	16.7%	15.3%	12.0%	13.9%	12.7%
Agricultural Employment as a Percent of Total Agricultural Exports	327	294	274	264	271	276	266	277	275	259
Agricultural Imports as a Percent of Total Gross Fixed Capital Formation Z\$millions Current Prices	32.4%	28.4%	26.2%	25.5%	26.2%	24.4%				
Agricultural Exports as a Percent of Total Gross Fixed Capital Formation Z\$millions Current Prices	37.4%	47.8%	48.0%	45.7%	46.4%	51.0%	53.0%	49.4%		
Agricultural Imports as a Percent of Total Gross Fixed Capital Formation Z\$millions Current Prices	11.8%	11.0%	17.7%	10.7%	13.8%	13.0%	10.0%	10.2%		
Agricultural GFCF as a Percent of Total Short Term Loans Z\$millions Current Prices	53	91	116	96	90	74	142			
	10.0%	11.0%	11.1%	7.8%	7.6%	6.5%	10.8%			
	164	180	224	304	333	371	441	792		

Sources: Agricultural Marketing Authority, Socio-Economic Review of Agricultural Industry  
Agricultural Finance Corporation, Annual Reports  
Central Statistical Office, Quarterly Digest of Statistics, 1988 and 1989

Many of the crops now being developed profitably by commercial farmers are already being taken up by resettlement and communal farmers, as is the case with coffee; other specialized crops show excellent potential for labor-intensive production by small farmers acting first as out-growers in joint ventures with commercial farmers and then, properly organized, as exporters in their own right.

Commercial farmers are increasingly switching from extensive cattle operations to wildlife farming in conjunction with gun and camera safari companies; potentially, such activities, besides being strongly allied with land and resource preservation, are highly profitable for communal farmers. In the drier areas of natural regions 4 and 5, such activities may well represent the highest economic use of the land. Furthermore, they do not require the research, exotic genetic stock and marketing subsidies which are

required to make beef production for export financially profitable. Wildlife programs can be carried out in communal and resettlement areas just as well as on commercial farms if proper incentives are established which provide an equitable distribution of benefits to community residents.

Despite rapid gains in production in communal areas, it was apparent that only those areas with higher rainfall benefitted from advances in the commercial agricultural sector, primarily in maize and cotton. These lands supported less than half the families on communal lands in the nation, and within these privileged districts only some 15% of households contributed the bulk of marketed crops.

Producer prices are set by Government in ways that frequently bear little relation to international prices, thus introducing inefficiencies. Government allocations of annual cotton production quotas, for example, while favoring domestic manufacturers at a highly subsidized rate over the export market, penalizes producers, making it impossible for them to receive a price for their crop that is attractive enough to act as an incentive for increased production. This has reduced export earnings and therefore foreign exchange available to the economy.

The tremendous increase in cotton production in communal areas has, thus far, been based on varieties developed for the commercial sector; future increases require bringing drier areas into production using varieties and water-harvesting techniques developed specifically for communal areas.

The distribution of benefits from agricultural growth, however, has been very limited, both by region and among households. There have been few research breakthroughs in dryland areas until very recently which might benefit communal farmers. Now dryland cotton with specialized techniques for water-harvesting may offer such farmers some opportunity for a cash crop, if marketing and input supply structures are located in reasonable proximity to these areas. Inadequate range management, overstocking and overgrazing continue to plague communal lands, since, so far, no institutional structures have developed which provide adequate incentives for proper range management.

### **3. The ZASA program**

It was within this context of economic and agricultural opportunities and constraints that GOZ and USAID developed the Zimbabwe Agricultural Sector Assistance (ZASA) program. There was broad agreement on the overall goals of the government's rural development program: promote continuing growth of the whole agricultural sector through both continued growth of the commercial subsector and expansion and extension of the services needed to allow the communal sector to participate equitably in this growth. Both GOZ and USAID recognized the higher costs associated with this strategy of equity as well as growth and agreed to assume the burden of making the investments necessary to make communal sector growth possible.

The resulting ZASA program, conceived in 1982, was to be a mechanism for supporting the overall goals of small farmer development and the individual projects which were seen as positive government initiatives likely to achieve them. A commodity import program was to be the mechanism for generating the local currency needed to

finance investments for communal area farmers. This was to focus on the agricultural sector and benefit both commercial farmers and, to a lesser extent, public sector agricultural institutions. The program proposed creating a forum, the ZASA Working Group, that brought together all the rural smallholder-oriented interests in government and analyzed prospective projects in terms of overall policy goals.

Specifically, the ZASA program was targeted at supporting efforts to alleviate 7 major constraints affecting the smallholder:<sup>17</sup>

- Research
- Extension
- Credit
- Marketing and Input Supply
- Land and Water Use
- Human Resource Development
- Policy and Planning

Prior to Independence, government efforts in each of these areas were focused almost exclusively on the commercial areas. Since that time, with assistance from ZASA and other donors, research efforts have included a substantial investment in on-farm trials in communal areas. The extension service has expanded its coverage to communal areas in an efficient way, making use of ZASA-funded communication radios and World Bank funding for transportation. Immediately after Independence, there was a massive expansion of credit to small farmers both as individual borrowers and through financial support to the cooperative unions, both ZASA supported. This expansion of credit had as its goal facilitation of the purchase of proven input packages by communal farmers.

The resulting increase in communal area production was channeled through a network of marketing depots in surplus-producing communal areas. Irrigation systems were established to serve communal and resettlement farmers; conservation and range management programs were established on overgrazed communal areas. Enrollment in the University's faculty of agriculture and in the agricultural colleges was expanded to provide the trained people needed to manage the expansion of these services to communal areas and to allow women to participate in these programs. All of these drew of support from ZASA.

The ZASA mechanism was designed to encourage small, innovative experiments through the flexible provision of seed money. Individual investments had a reasonable chance of success since they had to follow standard government procedures, were included in the Public Sector Investment Program, and would come under the scrutiny of an inter-ministerial review process through the ZASA Working Group.

To date, US\$55 million have been obligated under the ZASA program, of which US\$43 million went to the commodity import program and US\$12 million to technical assistance and overseas training, including both short courses and post-graduate study. These funds have amounted to between 1% and 4% of government's agricultural budget and from 3% to 11% of total donor funding annually since 1983.<sup>18</sup> Funds have

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<sup>17</sup> USAID, Zimbabwe Agricultural Sector Assistance, PAAD Authorization (613-0209), 9/23/82; Zimbabwe Agriculture Sector Assistance (ZASA) Program Amendment, (613-T-607), 8/9/88.

<sup>18</sup> EEC, op. cit.

been programmed by the Working Group in consultation with MFEPD and USAID; this system differentiates ZASA from other donor-funded programs and is responsible for ZASA's ability to act rapidly when resources are needed to support identified constraints.

The criteria for allocating funds are that they:

- Be directed at the relief of identified constraints
- Have the potential to improve the welfare of smallholders
- Have rational justification as investments
- Meet identified budget shortfalls, and
- Do not impose unacceptable recurrent costs.

**Table C.2**

**Total & Average  
ZASA Allocations**

	Allocation Amount	
	Local Z\$	US\$
<b>TOTAL</b>	<b>62,146,534</b>	<b>12,129,401</b>

Average Allocations			Average Allocation Amount	
			Local Z\$	US\$
No. of Subprojects	84	Average /project	1,100,834	440,334
No. of Agencies/Depts.	18	Average/agency	5,137,224	2,054,890

Source: USAID, MFEPD, November 1990

As of December 1990 84 separate projects implemented by 18 different institutions had been funded; Z\$12 million (US\$30 million) remained to be allocated. This represents an average of Z\$1 million (US\$440,000) per project or Z\$5 million (US\$ 2 million) per organization. (Table C.1) <sup>19</sup>

<sup>19</sup> *ibid*; and USAID and MFEPD files.

**Table C.3**

<b>Summary of ZASA Local Currency and US\$ Allocations &amp; Expenditures by Constraint Area</b>
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Constraint Area	ZASA Allocations			
	Local Z\$	%	US\$	%
Agricultural Research	3,652,393	6%	1,702,474	14%
Agricultural Extension	6,611,186	11%	2,650,694	22%
Agricultural Credit	2,044,000	3%	13,500	0.1%
Marketing and Input Supply	20,937,600	34%	645,668	5%
Land & Water Use	10,681,932	17%	968,071	8%
Human Resources, Training for Agric.	18,173,873	29%	5,954,244	49%
Policy Planning	32,000	0.05%	194,750	1.6%
Monitoring/Evaluation	13,550	0.02%	0	0
<b>TOTAL</b>	<b>62,146,534</b>	<b>100%</b>	<b>12,129,401</b>	<b>100%</b>

Source: USAID, MFE PD, November 1990

Table C.2 reveals that, of local currency funds, Z\$21 million (34%) supported marketing and input supply projects, while Z\$18 million (29%) went to education and training efforts. Land and water use received almost Z\$11 million (18%) and extension activities absorbed Z\$6.6 million (11%). Lesser amounts went to agricultural research (Z\$3.6 million) and credit (Z\$2 million), while token amounts went to policy planning, monitoring, and evaluation. Of the US\$ 12 million allocated for technical assistance, short-term and degree based overseas training, and hard currency equipment purchases for public sector operations, the largest amount, US\$ 6 million (50%), went for higher education and short-term training abroad, while US\$ 2.6 million (22%) was allocated to support extension efforts with imported communications equipment. US\$ 1.6 million (13%) supported research efforts, largely through provision of technical assistance.

For each of the first three years of the project, from 1983 to 1986, annual CIP funds allocated were approximately US\$10 million; when the project resumed in 1988, funding was reduced to US\$5 million a year. Private sector importers received 84% of CIP allocations and public sector agencies the remaining 16%. The overall focus of the program was on the agricultural sector, with at least 80% of CIP funds having been allocated for its development.

## **SECTION D**

### **COMMODITY IMPORT PROGRAM**

#### **Concept and Objectives**

##### **Concept**

The local currency resources for ZASA are generated through the commodity import mechanism. Commodity import programs (CIPs) involve United States financing of the foreign currency cost of imported commodities, insurance, and shipping for use in the economies of developing countries and have been an integral part of American foreign assistance over the past 30 years. As opposed to project assistance, which focuses on a single set of activities designed to achieve specific results, program assistance which includes CIPs aims at relieving a budgetary or balance of payments constraint faced by a developing country. The commodities provided under CIPs run the gamut of manufactured goods and raw materials needed by a given economy and in some cases may also include foodstuffs, although these more often are handled under PL-480.

A common point with all such programs is their ability to provide foreign exchange or commodities more rapidly than could be achieved through project assistance. The rate of disbursement of CIPs can be changed to meet political or other considerations far more easily than project assistance where interruption of assistance can leave half-finished projects detrimental to the interests of both the developing country and the United States. Programming of local currency generated by the purchase of eligible commodities, usually sourced in and shipped from the United States, is normally done jointly by the government and USAID based on agreed upon priorities. Local currency funds are generally used for development purposes.

The ZASA program has special characteristics which distinguish it from standard CIPs. CIP-like programs (including ZASA) are defined as those which concentrate on a given sector, have a more developmental thrust and are expected to generate an on-going policy dialogue concerning the sector receiving assistance. The ZASA CIP focuses specifically on the agricultural sector, providing foreign exchange to alleviate the constraints on the commercial agricultural sector and the public sector's ability to import much needed American equipment and raw materials. Utilizing an interministerial reference group, it allocates local currency funds thus generated in a unique way to alleviate problems and key constraints to small farmer development.

##### **Goals and Objectives**

The major goal of the ZASA commodity import program has been to assist the GOZ in meeting its goal of "growth with equity" within the agricultural sector, a goal which USAID both shared and supported. The achievement of this goal required a program which would provide for sustained growth in commercial agriculture while directing new resources to the communal areas ignored in the past, and spread the benefits of growth in agriculture to the large masses of marginalized communal farmers. In view of the demonstrated capacity of the GOZ's civil service, known to be one of the most efficient in Africa, to administer development resources, a sector program, rather than project assistance, was decided upon. Thus the program constituted, in essence, a

controlled resources transfer to the GOZ in the form of budgetary support targeted to meet resource gaps in seven constraint areas which needed to be addressed to achieve small farmer development. Tranched release of program funds was made contingent upon favorable annual reviews taking account of movement toward achievement of:

- Reduction of constraints on smallholder agriculture
- Reasonableness of activities for improving smallholder agriculture
- Clearness about the additionality of program funds in terms of identified budgetary shortfalls, and
- Minimal negative impact on recurrent costs.

While supportive of what were perceived to be generally sound overall policies, "policy dialogue at both micro- and macro-levels affecting agriculture and smallholders in particular [was] to be a key feature of the ZASA program."<sup>20</sup>

The clear foreign exchange needs of the agricultural sector and of institutions attempting to address the constraint areas in communal agriculture made the Commodity Import Program mechanism a logical choice since this approach would "maximize trade advantages for the US while responding fully to the requirements of the Zimbabwean economy."<sup>21</sup> The program was to be flexible and fast-disbursing, meeting the critical foreign exchange needs of the sector while rapidly generating the local currency needed by cooperating Ministries and their agencies for activities directed toward the constraint areas. CIP programs of all donors constituted between 5% (in 1986 and 1988) and 8% (in 1987) of national imports to Zimbabwe, equal to over ECU 43 million a year (Eurostat 1990, p. 178). In so doing these programs made an important contribution as foreign exchange shortages became increasingly acute.

## Findings

### Project Description

The ZASA program provided a total of US\$55 million between 1983 and 1990 (out of an initial authorization of US\$62 million). US\$43 million was allocated to the CIP and the remaining US\$12 million to technical assistance. (See Tables D.1, 2, & 3) Two project numbers (613-K-604 and 613-K-607/607A) mark the two separate phases in which ZASA operated, the first from 1983 through 1986 and the second in 1988 and 1989. Resource flows were on the order of US\$10 million a year in the 1983-86 phase and US\$5 million during 1988 and 1989.

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<sup>20</sup> USAID, PAAD, Sept. 23, 1992: 3

<sup>21</sup> Ibid: 3

**Table D.1**

**ZASA Commodity Import Program  
Summary of Allocations, Private Sector  
613-K-604; as of June 6, 1986 (US\$)**

<b>Private Sector</b>	<b>Tractors &amp; Spares</b>	<b>5,768,446</b>			
<b>Farm Goods</b>	<b>Combines &amp; Spares</b>	<b>3,829,416</b>			
<b>Vehicles</b>	<b>Hay Balers &amp; Spares</b>	<b>1,140,496</b>			
	<b>Lift/Loading Equip</b>	<b>571,686</b>			
			<b>11,310,044</b>		
<b>Livestock</b>	<b>Poultry and Related Items</b>				
	<b>Bulls, Bovine Semen &amp; Embryos</b>	<b>385,254</b>			
	<b>Feed Supplements</b>	<b>293,500</b>			
	<b>Dairy Equipment</b>	<b>273,672</b>			
	<b>Growth Stimulants</b>	<b>226,000</b>			
	<b>Silage Equip. &amp; Spares</b>	<b>56,816</b>			
	<b>Baby Breeder Chicks</b>	<b>30,000</b>			
			<b>1,265,242</b>		
<b>Material</b>	<b>Hay Baling Twine</b>	<b>793,326</b>			
	<b>Seeds</b>	<b>266,486</b>			
			<b>1,059,812</b>		
<b>Total Farm Goods</b>				<b>13,635,098</b>	
<b>Other Agricultural Equipment</b>	<b>Manufacturing and Processing</b>				
	<b>Presses &amp; Spares</b>	<b>349,023</b>			
	<b>Meat Processing Equip.</b>	<b>46,120</b>			
			<b>395,143</b>		
<b>Other</b>	<b>Computer &amp; Spares</b>	<b>806,898</b>			
	<b>Truck Components &amp; Spares</b>	<b>696,630</b>			
	<b>Engines, Pumps &amp; Spares</b>	<b>488,312</b>			
	<b>Agric. Aircraft Spares</b>	<b>335,462</b>			
	<b>Machines/Implement Parts</b>	<b>273,001</b>			
	<b>Sprayer/Sprinkler Parts</b>	<b>141,660</b>			
	<b>Outboard Motors</b>	<b>46,502</b>			
	<b>Communication Equip.</b>	<b>45,620</b>			
	<b>Other Equip.</b>	<b>29,414</b>			
			<b>2,863,499</b>		
<b>Total Other Agricultural Equipment</b>				<b>3,258,642</b>	
<b>Raw Materials</b>	<b>Manufacturing</b>				
	<b>Resins, Plastics &amp; Filler Tow</b>	<b>4,643,420</b>			
	<b>Tire &amp; Belt Mfg. Materials</b>	<b>1,357,542</b>			
	<b>Food Packaging Materials</b>	<b>1,064,829</b>			
	<b>Fertilizer Raw Materials</b>	<b>287,638</b>			
	<b>Fertilizer Raw Materials</b>	<b>159,430</b>			
	<b>Nylon Yarn</b>	<b>49,896</b>			
			<b>7,562,755</b>		
<b>Food Processing</b>	<b>Sausage Casings</b>	<b>274,850</b>			
	<b>Seasoning</b>	<b>152,761</b>			
			<b>427,611</b>		
<b>Total Raw Materials</b>				<b>7,990,366</b>	
<b>TOTAL PRIVATE SECTOR ALLOCATIONS</b>		<b>US\$</b>		<b>24,884,106</b>	

Source: USAID records

**Table D.2**

<b>ZASA Commodity Import Program Summary of Allocations, Public Sector 613-K-604; as of June 6, 1986 (US\$)</b>
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<b>Public Sector</b>				
Cotton Marketing Board				
Ginning Equipment	5,044,785			
Agricultural Marketing Authority				
Computer Equipment and Software	771,358			
Cold Storage Commission				
Meat Weighing and Process Equip.	87,000			
		5,903,143		
			5,903,143	
<b>TOTAL PUBLIC SECTOR ALLOCATIONS US\$</b>				<b>5,903,143</b>

Source: USAID records

**Table D.3**

<b>ZASA Commodity Import Program Summary of Allocations, Private &amp; Public Sectors 613-K-604; as of June 6, 1986 (US\$)</b>
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<b>TOTAL PRIVATE AND PUBLIC SECTOR ALLOCATIONS</b>	<b>US\$30,787,249</b>
<b>UNALLOCATED AMOUNT</b>	<b>212,751</b>
<b>TOTAL PROGRAM</b>	<b>US\$31,000,000</b>

Source: USAID records

Over the life of the ZASA program, 87% of the resources were allocated to the private sector and 13% to the public sector. During the first three years, private sector allocations in the program were 81%, with the remaining 19% going to public sector agencies. All of the 1988 and 1989 tranches went to the private sector.

At least 80% of CIP funds went to the agricultural sector. The exact proportion going to agriculture cannot be determined exactly from available reports because the final destination of a large volume of raw materials in no. 604 is not specified and the raw materials themselves could have been used to produce products for other sectors. At least 80% of the resources of no. 604 went to agriculture. Only 49% of the funds of no. 607 did so, with 33% for transport and 18% for mining. All of the 1989 funds of no. 607A were used in agriculture.

### Eligibility Criteria for CIP Funding

There were very few restrictions on what the CIP funds could be used for. Nonetheless, both USAID and the GOZ interpreted the project document to mean that the agricultural sector was to receive high priority in the assignment of CIP funds. Foreign exchange was available to both the public and private sectors, with a maximum of 20% to go to the public sector. After an interruption in funding starting in 1986 for reasons extraneous to the program, the CIP resumed in 1988 as no. 607 at a reduced level of US\$5 million for that year. The eligibility criteria were modified restricting funding to the private sector only; however, at the same time, the program was, in effect, broadened to include mining and transportation as well as agriculture. In 1989 when the program number was changed to no. 607A, eligibility was restricted to private sector importers, as in no 607, and further restricted to the agricultural sector, thus returning the

program to its original objectives. The 1989 US\$5 million tranche, expected to be the last of the CIP, brought total CIP allocations to US\$43 million and total program obligations to US\$55 million. No further obligations were planned as of December 1990.

## Procedures

Though different in nature from standard CIPs because of its agricultural and small farmer focus, the ZASA program used relatively standard and well-established CIP procedures to meet project objectives. The Ministry of Industry and Commerce advertised publicly for applications, reviewed them, made a preliminary selection of applicants, and proposed allocations to USAID. USAID vetted these approved applications and authorized payment to the relevant US supplier. Approved applicants made payment or provided guarantees of local currency. Goods were shipped against letters of credit and, upon receipt, importers paid MFEPD. The resulting local currency funds were deposited for dispensation upon approval by the ZASA Working Group. Two types of letters of credit were used under the ZASA program with different results.

### **Bank Letter of Credit (BLOC)**

The two operational mechanisms used to handle imports in the ZASA CIP have been bank letters of credit (BLOC) and direct letters of commitment (DLOC). The BLOC system was used from the beginning of the program through 1988. It caused major problems for importers, the Ministry of Industry and Commerce (MIC) and USAID. Under program rules, the minimum allocation was US\$10,000, which made the program open to even very small firms. Accordingly, a very large number of requests were received; 122 were approved under project no. 607. MIC often funded only part of an importer's request. Cuts were somewhat arbitrary and therefore allotments did not cover the full cost of the commodities requested. The importers knew in advance that their requests for foreign exchange would be cut and therefore overstated their true requirements by some amount determined more by gamesmanship than business acumen. This led to time-consuming negotiation between applicants and MIC over the amount to be finally awarded. For USAID, this system posed a severe management problem. The ZASA Working Group had no direct role in allocating CIP funds except for proposing that unallocated technical assistance funds be reallocated to the CIP.

The BLOC system was satisfactory only to the banks providing the letters of credit since they were able to charge handsome fees for each operation or adjustment to an operation. The bank in charge of operations in the United States (Chemical Bank) eventually received a total of US\$250,000 in fees and commissions (the initial bill was US\$300,000) for letters of credit whose total value equalled approximately US\$4,750,000 - 5.3% of the value of the letters of credit for project no. 607. Despite the large number of relatively small operations (which increased transaction costs for Chemical), the charges appeared excessive to USAID, leading to the proposal of an alternative system, direct letters of commitment (DLOC).

## Direct Letter of Commitment (DLOC)

After considerable effort, USAID/Zimbabwe obtained approval to use the DLOC system to replace of the BLOCs starting in 1989 for project no. 607-A. At the same time, the minimum limit for a funding request was increased to US\$50,000 to reduce the number of operations and thus reduce management problems. (Other bilateral donors have similar or higher limits for their CIPs.) The number of successful applications which fulfilled all requirements for the program was reduced to 22. Furthermore, MIC was required to process those applications which fit the guidelines for the program on an accept-or-reject basis to eliminate gamesmanship and the length of negotiations. All but US\$90,000 of the funds available have been allocated and therefore the CIP component of the ZASA program should be completed by early 1991.

The procedures established for the new system are quite simple and clear. USAID vets the applications received from MIC for eligibility under program criteria; final selection is then made by MIC. Successful applicants provide a bank letter of guarantee for payment of the local currency amount due (in effect, insurance against default). USAID then issues a DLOC to the US supplier which has the same effect as did a BLOC under the previous system. The supplier ships the goods and against documentation confirming shipment, payment is made to the supplier from the USAID Paris office. The importer, in turn, pays MFEPS within 7 to 10 days at the current official exchange rate. These funds are deposited in the National Development Fund at the Reserve Bank. Only at this point do the monies generated by the CIP operation become available for the local currency side of the program.

### Performance

#### Private and Public Sector Allocations

The US\$43 million in CIP funds provided between 3% and 5% annually of the foreign exchange needs of the public and private sectors engaged in agricultural production, input supply, processing, and marketing since 1983. The public/private sector proportions established as program criteria were, in fact, observed, with the private sector receiving about 84% of allocations and the public sector 16% under no. 604. All allocations went to the private sector in project nos. 607 and 607A. (Table D.4)

#### Agricultural and Non-Agricultural Sector Allocations

Mission staff and the GOZ interpreted the program to be one of assistance to the agricultural sector, although there were almost no restrictions established in the project document as to what use CIP funds in no. 604 could be put. Most of the CIP allocations went toward the purchase of commodities which benefitted agriculture either directly or indirectly. For the entire ZASA CIP, the public sector allocated 100% of its resources to agriculture, the private sector at least 75%; the overall program provided at least 80% of funds to agriculture. In no. 604, at least 75% of private sector allocations and all of those given to public sector agencies were used for the purchase of commodities for agriculture; overall the proportion used for agriculture was at least 80%. Because of the way data are reported for raw materials, final destination cannot be determined in many cases and thus the proportion was probably much higher. The addition of transport and mining as beneficiaries eligible for allocations when the program was reinstated in 1988 reduced the proportion of total funding used in agriculture to 49%, with 33% going

to transport and 18% to mining. It is possible that some of the vehicles bought under the transport category served agriculture. (Table D.4)

**Table D. 4**

**Destination of CIP Funds  
(Percent)**

No CIP	AGRICULTURE			NON-AGRICULTURE			TOTAL
	Private/ Public	% of Total	Subtotal	Mining	Transport	Subtotal	
ZASA							
613-K-604	Private	84	68			32	100
	Public	16	100			0	100
	Total	100	73			27	100
613-K-607	Private	100	49	18	33	51	100
	Public	0				0	0
	Total	100	49	18	33	51	100
613-K-607A	Private	100	100			0	100
	Public	0				0	0
	Total	100	100			0	100
NON-ZASA							
613-K-603	Private	88	18			82	100
	Public	12	22			78	100
	Total	100	19			81	100
613-K-605	Private	81	0			100	100
	Public	19	0			100	100
	Total	100	0			100	100
613-K-605A	Private	80	0			100	100
	Public	20	100			0	100
	Total	100	20			80	100
613-K-606	Private	99	0			100	100
	Public	1	0			100	100
	Total	100	0			100	100

Source: USAID records

**Comparison of the ZASA CIP with other USAID-funded CIPs**

Other USAID-funded CIPs not specifically targeted for agriculture in Zimbabwe provided only a small percentage of their foreign currency allocations to the agricultural sector; most of that which did benefit agriculture consisted of foreign currency allocations to the public sector. Program no. 603 gave the private sector 88% of allocations (as of March 1, 1985) with the remaining 12% going to the public sector. Private sector allocations identifiable as going to agriculture (US\$7.9 million for tractors and combines) account for 18% of the sector's allocations; the percentage of public sector allocations for agriculture is only 22% (cotton presses). In CIP no. 605 neither the private nor the public sector appears to have dedicated any resources to the agricultural sector; in the continuation of the program (605A), the public sector seems to have dedicated all of its resources to agriculture (including cotton), but from the classifications it is not possible to discern if the private sector used any of its resources for agriculture.

Thus the ZASA CIP is clearly different from other USAID-funded CIPs in that its foreign exchange went in a very high proportion to the agricultural sector whereas other USAID-funded CIPs went almost entirely to other sectors, with the exception of funds allocated to public sector organizations. It is also different from CIPs run by eight other

donors for which information is available. None of these has a program focused primarily on agriculture, although four donors do include agricultural equipment as an item in their list of eligible commodities.

### Types of Commodities Purchased under the ZASA CIP No. 604

At least four-fifths of the commodities purchased under the ZASA CIP are identifiable for the agricultural sector. Good data are available for broad categories of goods purchased in no. 604 (Tables D.1 & 2), above). In the private sector farm goods accounted for over US\$11 million (45%) in allocations, with tractors and spares making up more than half and combines one-third of the total. A large variety of other goods account for about 13% of allocations. Raw materials, many not specifically associated with agriculture, account for the remaining 32%.

In public sector allocations, 85% (US\$5 million) went to the CMB for ginning equipment, 13% to the Agricultural Marketing Authority (AMA) for computer equipment and the remainder to the Cold Storage Commission for scales to permit retail meat sales in high-density suburbs and for meat-processing equipment.

### Numbers 607 and 607A

In 607, 49% went to agriculture, 33% for transport and 18% for mining (Tables D.5 & 6, below). Breakdowns are not possible for nos. 607 and 607A because of the short-comings in the computer program used for accounting for these projects. It is possible, however, to establish that within agriculture, agricultural forestry constituted only 1% of the category, agricultural chemicals 30%. The remaining 69% is listed simply as "agriculture." Within mining and transport, no subcategories are available. In 607A, all allocations are listed as being targeted for agriculture. Such general classifications are of no analytical use.

**Table D.5**

**ZASA Commodity Import Program  
613-K-607 Allocations (1988)  
(as of June 21, 1989)**

Private Sector	Amount	Number of Allocations
<b>AGRICULTURE</b>		
Agricultural Chemicals	704,950	7
Agricultural Forestry	31,200	1
Agriculture	1,647,767	31
<b>Total for Agriculture</b>	<b>2,383,917</b>	<b>39</b>
<b>MINING</b>		
Mining	894,083	17
<b>Total for Mining</b>	<b>894,083</b>	
<b>TRANSPORT</b>		
Transport	1,628,771	65
<b>Total for Transport</b>	<b>1,628,771</b>	<b>121</b>
Unallocated or not included in Report for 6/21/89	93,229	
<b>TOTAL PROGRAM</b>	<b>5,000,000</b>	<b>121</b>

Source: USAID records

Note: 100% of CIP funds were allocated to the private sector.

**Table D.6**

**ZASA Commodity Import Program  
613-K-607A Allocations (1989)**

as of June 21, 1989

<b>Private Sector</b>	<b>Amount</b>	<b>Number of Allocations</b>
<b>AGRICULTURE</b>		
Agriculture	4,015,178	16
<b>Total for Agriculture</b>	<b>4,015,178</b>	<b>16</b>
<b>TOTAL FOR PROGRAM</b>	<b>4,015,178</b>	<b>16</b>

Source: USAID records

## **Impact**

### **Efficiency**

#### **Overall Efficiency**

The CIP program, for the most part, achieved its goal as a fast-disbursing mechanism generating local currency for other project objectives, despite minor initial delays. The grant agreement was signed on September 29, 1982, but foreign exchange disbursements and local currency generation did not begin until June 1983. Initially, there were two delays in starting up the program. The first was the result of a several month delay in setting up the ZASA Working Group, which was not formed until January 1983. This delay appears to have originated from a number of causes. At that time there was a new Minister of Finance, Economic Planning and Development and massive changes of staff throughout government, all of which made organizing inter-ministerial groups difficult. Furthermore, there was little experience in dealing with donors. This problem was compounded by the question of whether or not a USAID representative should sit on the ZASA Working Group. Additionally, within the Ministry a decision had to be made concerning which group within the Ministry, the donor-assistance group or the planners, was to be responsible for ZASA. Eventually, the choice went to the donor-assistance group, which currently chairs the Working Group.

#### **Rapidity of Disbursement**

A major justification for using a commodity import program as a funding mechanism for ZASA was the assumption that a CIP would permit rapid disbursement of funds, which was deemed essential to program success. The alternative of project assistance was rejected because of the long lead-time intrinsic to this type of assistance. The ZASA project was signed in September 1982 and the first disbursements were made 10 months later in July 1983. Despite concern expressed at the time with the perceived delay in the availability of local currency resources, the ZASA CIP was much faster in starting disbursements than would have been possible with project assistance. Its disbursement was also faster than USAID commodity import programs run in other countries of eastern and southern Africa, some of which took up to two years to begin disbursement.

**Table D. 7**

**Rapidity of Disbursement:  
CIP and Development Fund/Technical  
Assistance Allocations  
from Sept. 1982- May 1986 (US\$000)**

Period	Months	COMMITMENTS		DISBURSEMENTS	
		CIP	TA/DF	CIP	TA/DF
9/82-6/93	10	11,000	4,000	0	0
7/83-3/84	9	0	0	11,000	7
4/84-12/84	9	3,000	0	2,100	225
1/85-8/85	8	9,000	0	8984	1,033
9/85-5/86	9	7,000	0	7,449	1343
Total	35	30,000	4,000	29,533	2,608
Percent				98.4%	65.2%

Source: USAID records

During the period from September 1982 through May 1986 a total of US\$29.5 million was disbursed for an average monthly disbursement of US\$840,000. Over the same time period, disbursement of US dollar technical assistance and development funds needed to complement allocations in the local currency part to the program totaled US \$2.6 million; allocations of technical assistance and development funds began only in January 1984. A total of US\$29.5 million in letters of credit had been disbursed by May 1986, 98.4% of the US\$30.0 million in letters of credit issued by that date. (Table D.7) It seems unlikely that any other type of assistance program could have disbursed this amount of funds in as short a period of time.

### Generation of Local Currency Funds

The lag inherent in the generation of local currency funds was recognized early and constituted a matter of concern recorded by project administrators at the beginning of the program. By August 1983 approximately US\$7.4 million in CIP funds had been allocated (US\$6 million to the private and US\$1.4 to the public sector), yet only about Z\$1 million in local currency had been generated, since local currency payments are not made until the commodities are shipped. The delay between the time that foreign currency funds are allocated and local currency is generated by the CIP still exists. For example, in mid-December all foreign currency resources under the CIP had been exhausted (with the exception of US\$90,000) and a total of 22 allocations had been made. However, local currency generation of approximately Z\$12 million is still anticipated since substantial equipment for which CIP resources have been allocated still has not been shipped and hence not paid for in local currency.

### Allocations of CIP Funds

Two of the four importers interviewed with respect to their allocations of CIP resources expressed dissatisfaction with the inordinate delays and an unrealistic amount of paperwork. Delays were viewed as long between the time the CIP was signed and when the actual allocations of foreign exchange were made by MIC. Coupled with factory production schedules, this made it difficult to meet deadlines for shipment in the Letters of Commitment. Another importer, however, thought the program

was run as efficiently as possible and, if given a choice of changing the way it was run, would leave it unchanged.

### Equity and Efficiency

With the US\$50,000 minimum under CIP no. 607-A, by June 21, 1989, (the most recent date for which computer print-out of allocations was available to the consultants), US\$4.3 million of the US\$5.0 million authorized had been allocated in 16 allocations. All went to agriculture (including one allocation to agricultural chemicals in this grouping) with the average size of allocations being approximately US\$267,000. Four allocations above US\$400,000 account for 68.6% of the resources, while 6 under US\$100,000 received 9.9%. A distribution of this kind raises the question of equity. The accept-reject criteria for selection of applicants guarantees that a few large importers will receive the bulk of the resources. This issue was brought up by the Ministry of Industry and Commerce. Another issue has been how many small firms in need of foreign exchange, but unable to reach the US\$50,000 limit, have been excluded.

### Inefficiencies

The only significant waste of money associated with the program appears to have been the rather high commissions paid U.S. banks under the BLOC system, later remedied under no. 607A by changing to DLOCs. One United States supplier did ship goods of a quality not in agreement with specifications and not useful to the purchaser; this matter is being handled by appropriate judicial process and in the meantime, the purchaser has been given another allocation of foreign exchange to obtain goods of the type originally specified.

### Effectiveness

#### Private Sector

All importers and end users surveyed reported that they were very satisfied with the quality of the equipment imported under the ZASA CIP. In large measure, the effectiveness of the CIP program in bringing in equipment and other commodities needed by the agricultural sector is clearly related to the traditional trade links between Zimbabwe and the United States with regard to agricultural equipment on composition of tractor and combine fleet. Machines being imported were "known quantities" being imported by dealers representing companies shipping the same types of equipment using non-CIP sources, which constituted the major source of their hard currency. However, importers view US equipment, and particularly spare parts, as expensive in comparison with European equipment. If free-sourcing were allowed, importers' bargaining power would be greater and a substantial part of the new machinery would be imported from sources other than the United States. Spare parts to maintain the productivity of existing US-made equipment would, however, still be bought from the US. Most combines would also continue to be imported from the United States. (Table D.8)

Table D.8

**Tractors and Combines Operated  
by Large-Scale Commercial Farmers**

MAKE OF MACHINERY	TRACTORS		COMBINE HARVESTERS	
	1987/88	1985/86	1987/88	
Massey-Ferguson	36.1	38.5	52.8	Number of combines 396
New Holland	—	—	18.7	
Fiat/A.C./Univ	18.0	13.3		Number of combines more than 12 years old 169
Ford	13.8	13.4		
Deutz	10.2	11.5		
Case/I.H.	9.5	9.9	9.6	Estimated Total Number of combines 591
John Deere	5.7	5.1	17.7	
Leyland	1.9	3.0		
Allis Chalmers	—	—	1.3	
Landini	1.8	2.0		
Caterpillar	1.7	1.5		
Renault	1.3	0.8		
Others	0.0	1.0		
<b>Percent US Origin</b>	<b>66.8</b>	<b>68.4</b>	<b>100.0</b>	
<b>Total</b>	<b>100.0</b>	<b>99.0*</b>	<b>100.1*</b>	

Source: Extracts from Commercial Farmers' Union Survey 1987/88 & 30/9/88, March 14, 1989

Notes: \* Percents vary from 100% due to rounding  
Response Rate 67%

The CIP constituted a welcome additional source of foreign exchange to bring in equipment with which both the dealers and the farmers were already familiar and which would have been purchased in any case, except for the lack of foreign exchange. According to the Commercial Farmers' Union (CFU), there are 17,500 tractors in Zimbabwe, with an average age of 15 years (up from 11 years at Independence). Farmers need to replace 1700 tractors per year due to foreign exchange shortages, yearly imports are only 500 units. Thus there is a huge pent-up demand. (One US\$23 million facility for tractor imports was oversubscribed by US\$600 million when member farmers were asked for their requirements for tractors.) There is no apparent source of foreign exchange to replace the tractors worn out in the production process. Despite the fact that the agricultural sector generates Z\$1.7 billion of which CFU members produce Z\$1.45 billion, CFU's allocation of foreign exchange is Z\$350 million, with the GOZ allocating the remainder to other sectors generating less foreign exchange.

Importers also complain of the lack of foreign exchange to cover the pent-up demand for agricultural machinery. One importer gave the example of a request placed with another CIP (not ZASA) in which he requested 51 bull-dozers, for which he already had customers; the allocation he received was sufficient to pay for 7. An IBRD hard currency fund made Z\$65 million available only to have Z\$629 million in applications. These examples are indicative of the tremendous demand for equipment of all kinds. Importers recognize ZASA as having made a small, but nonetheless important, contribution in allowing importers access to foreign exchange to satisfy part of their customers' needs for this equipment.

One way of estimating the contribution of ZASA to improving the capital stock of the agricultural sector would be to compare the value of tractors and spare parts imported under ZASA to the value of existing tractors. This comparison would be more significant than simply comparing the number of ZASA tractors to the total stock, since the productivity (and horsepower) of new imported tractors is much higher than existing,

1970s-vintage tractors. If, for example, existing tractors, despite their age, had an average worth of US\$10,000 (because of the impossibility of obtaining a sufficient number of new tractors), the stock of 17,500 tractors would be worth US\$175 million; thus the contribution of US\$5.8 million in tractors and spares provided by no. 604 would be 3.3%. Data for nos. 607 and 607A are not available in disaggregated form, but on the assumption that the same proportion of private agricultural CIP funds were dedicated to tractors as in no. 604 (18.7%, which does not seem unreasonable), an additional US\$1.4 million might have been spent on tractors and spares. Based on these assumptions, the entire CIP may have provided a total of US\$7.2 million, or just over 4% of the value of the tractor stock in the country and a small, but nonetheless important, contribution to commercial agriculture. The importance of ZASA's contribution was recognized by the President of the Commercial Farmers' Union in an interview in late 1990. Without the program, the increase in the average age of tractors would have been even greater, from 11 years at Independence to 15 years at present (with 10 years constituting the normal economic life of a tractor, according to the Coffee Growers' Association). In view of the age of the tractor fleet, the supply of spare parts to extend the useful life of aging machines was particularly important to maintaining productivity in commercial agriculture.

Because of the way records are kept, disaggregated figures on numbers of tractors and combines and numbers, types and value of parts are not available. However, since the authorized dealers of United States farm equipment companies were directly involved, and since they imported only equipment which they had already sold and spares they knew they could sell, it is clear that only equipment and spares needed by farmers were imported. Dealers reported that demand for both new equipment and unobtainable spares exceeded what they were able to provide for their customers, even with the help provided by the ZASA CIP; none of the dealers reported having any spares remaining unused in inventory.

Despite a decline in the number of commercial farmers, from 6700 in the early 1970s to 4800 in the early eighties, in the post-Independence period, production of crops grown predominantly by commercial farmers remained extremely important to the country and expanded substantially. Protected by Lancaster House agreements which provided secure tenure without the fear of expropriation for a period of 10 years (expiring in October 1990), commercial farmers made substantial investments in their enterprises, the results of which can be observed in a growing volume of production within the large-scale farming sector. Maize produced for the market was grown largely by commercial farmers in the first few years after Independence; between 1980 and 1986 maize production increased by 39%. It was only in the late 1980s that commercial production of maize became relatively less important as marketed production from communal areas increased.

### **Wheat Self-sufficiency**

ZASA CIP was especially significant to Zimbabwe's becoming self-sufficient in wheat. Wheat is grown almost exclusively by commercial farmers under capital-intensive, mechanized and irrigated conditions. Wheat production increased by 28% between Independence and 1988 as a result of an ambitious GOZ program to achieve self-sufficiency in wheat; GOZ's National Farm Irrigation Fund (NFIF) provides low interest loans for irrigation of land dedicated to wheat production. This program has been strongly supported by ZASA through the importation of combines which would

otherwise have been unavailable in sufficient numbers. ZASA's contribution to maintaining and upgrading the combine fleet may have been even more important than its tractor imports since there were only 580 combines (up from about 300 at Independence) in the country in 1986. Assuming an average value of US\$50,000 each (new combines financed by the ZASA CIP cost US\$67,000), they would be worth US\$29 million; no. 604 brought in US\$3.8 million in combines and spares, or about 13% of the stock. Combines were significant enough to the nation's wheat self-sufficiency program that the Minister of Agriculture, U.S. Ambassador and other dignitaries saw fit to preside at the handing-over ceremony for 6 combines, 1% of the total number in the country.

### Other Commercial Crops

Increases in other commercial crops would not have been possible without programs like ZASA, which made up some of the shortfall in foreign exchange for the commercial agricultural sector and thus provided for part of the need for equipment and inputs. Between Independence and 1988, soya production rose by 20%, peanuts by 35%, coffee by 140% (related to the local currency side of ZASA), dried beans by 109%, flue-cured tobacco by 8%, cotton by 122%.

Equipment and inputs imported under the ZASA CIP also contributed to increased yields and employment. Yields of other crops during the same period also increased significantly -- 21% in wheat, 20% in maize (to 1986), 20% in soya, and 25% in groundnuts.<sup>22</sup> Nevertheless, overall agricultural employment fell in the post-Independence period by more than 20% in response to minimum wage laws and regulations making it more difficult to fire redundant permanent workers. The CIP program has worked against this trend and has had a positive net impact on employment despite the highly mechanized and capital-intensive nature of commercial agriculture. By breaking bottlenecks and putting repaired and new equipment in the field, it has increased the area, all other things being equal, that commercial farmers are able to dedicate to crop production and more intensive livestock activities such as dairy operations (also financed with CIP funds). Because of the strong linkages of commercial agriculture with the industrial and processing sectors, increased production generates further employment in these sectors.

### Public Sector

Public sector organizations also made effective use of CIP funds and helped increase production in communal areas. For example, communal and other small-scale farmers increased their percentage of seed cotton production from 20% in 1981 to 66% in 1989, a period which saw total cotton production rise from 161,000 metric tons to 261,000 metric tons (Table D.9) ZASA provided the Cotton Marketing Board with almost US\$500,000 in foreign currency which was used for importing 20 fork-lift trucks needed to handle additional production; ZASA also provided approximately Z\$1 million in local currency for construction of depots in communal areas. CMB received US\$2 million from CIP no. 605.

**Table D.9****Percentage of Cotton  
Production by Farm Size**

Years	1981	1982	1983	1984	1985	1986	1987	1988	1989
Large-scale prod. %	80	61	62	55	50	45	48	39	34
Communal & other small-scale prod. %	20	39	38	45	50	55	52	61	66

Source: Calculated from data in Annual Reports, 1985-1990, Cotton Marketing Board

The marketing boards would never have been able to handle the rapid growth in the number of registered growers of maize, cotton, etc. without improvements in the Agricultural Marketing Boards' (AMA) computer system. The storage capacity of AFC computers was increased significantly with US\$770,000 in ZASA CIP funds in order to handle a large increase in the number of client accounts.

## Conclusions

1. The ZASA CIP was effective in providing US\$43 million of foreign exchange needed by both the private and the public sectors to increase production of principal crops.

It should be noted, however, that the program was small relative to the requirements of both sectors. For example, in 1989 ZASA provided CIP funds of US\$5 million, approximately 3% of foreign exchange allocations to the agricultural private sector which totaled Z\$350 million; no foreign exchange was provided to the public sector in either 1989 or 1990.

Public sector institutions, particularly the marketing boards, used foreign exchange provided by ZASA to extend their services to the communal areas in addition to supporting the commercial areas which had been their primary focus up to Independence. The ZASA CIP (as well as the local currency side of the program) contributed to this extension to the communal areas and was, in part, responsible for the substantial increase in maize production and to the phenomenal increase in cotton production among communal area farmers. The US\$5 million in CIP funds (86% of public sector CIP funds) in conjunction with large investments in the CMB and Cotton Training Center played a significant role in dramatically increasing cotton production. The investment of nearly US\$800,000 in CIP funds for computer equipment and software for the Agricultural Marketing Board supported the expansion of services of all the marketing boards to communal areas.

2. The resources provided in foreign currency as well as in local currency were perceived by the various agencies and marketing boards receiving assistance as additions to resources they would otherwise have received from the Government, rather than replacements of them.

The availability of foreign exchange in conjunction with local currency was deemed crucial by managers of many of the agencies in that together the two allowed them to break bottlenecks that would not have been possible with either alone, particularly with local currency alone. For example, the National Parks and AGRITEX would have found it very difficult to obtain much needed radio communications systems without having additional resources available in both dollars (for purchasing the radios)

and local currency (for purchasing antennas and setting up the system). CMB and GMB have specifically cited purchases of forklift trucks which were long overdue and which would not have been possible without foreign currency. GMB also benefitted from a barter deal which, though financed by local currency, made it possible to import coffee grading equipment. This equipment made a very significant contribution to Zimbabwe's earnings of foreign currency from export of high quality coffee.

3. Targeting of CIP resources to the agricultural sector was both correct and proper and constituted the best use of available resources in the years just after Independence.

By eliminating bottlenecks in the commercial agricultural sector through provision of much needed foreign exchange, the CIP increased employment both directly in the sector and indirectly in the processing industry. It made a major contribution to the nation's self-sufficiency in wheat. Public sector CIP funding also raised marketed production, incomes and welfare of communal small farmers through making possible new GMB and CMB depots located specifically to support communal area production, particularly for maize and cotton, as well as coffee. Therefore, the decision to provide CIP foreign exchange to the public sector as well as to the private sector was well advised. When the program was resumed, after a hiatus, at lower funding levels (nos. 607 and 607-A), the decision to divert resources to the mining and transport sectors appears ad hoc and questionable; the decision to fund agriculture exclusively the following year is laudable. In both cases, reserving 100% of CIP foreign currency funds for the private sector was reasonable in view of the limited amount of funding available (US\$5 million in each year).

4. CIP funds provided to both the private and public sectors were invested productively and therefore increased the supply of goods by an amount sufficient to offset any initial inflationary impact due to expenditure on the commodities brought in under the program.

Transfers by donors raise the issue of increasing the money supply within an economy, that may lead to inflation. Depending on how the funds are used, there will be a small or large multiplier within the economy which will play itself out over varying periods, enlarging demand in the economy. Given the modest size of the ZASA program, which even in its largest years, was only a fraction of one percent of GDP, its inflationary impact, in any case, would be minimal; this is particularly true given budget deficits rising from 9 to 12% of GDP over the period of the project. Furthermore, it is important to note that while the initial impact of any expenditure is inflationary, the medium- and long-term impact depend on the productivity of the investment. The impact could be highly deflationary, as in the case of purchasing spare parts, putting capital equipment of far greater value than the cost of the parts back into production. The analysis of the local currency side of the program arrives at the same conclusion; however, since many of these projects impact directly on small farmers and their incomes, and because of a marginal propensity to consume simple, domestically-produced products with low import contents whose supply is very elastic, the inflationary impact is likely to be negligible.

ZASA in Zimbabwe has supply and demand effects in the economy. Time-lags vary depending on the type of the investment. The demand effect through the multiplier is quick, working through the system within about two years. The supply effect will be both quick, as in the case of spare parts, and long term through the development of greater institutional and human capacities. The net effect in the short-term may be inflationary. In the medium- to long-term, it could very well be deflationary. ZASA, by

focussing on the small farm and agricultural industry sectors, has brought new opportunities, improved efficiencies and increased economic activity to the sector that supports the great majority of Zimbabweans. It has not been a contributing factor of any significance to the increasing inflation and shortages besetting the country's economy. More probably it has acted as a brake on inflation through its contribution to increased production and increased availability of foreign exchange, both directly and indirectly in the export production it has fostered.

5. The present system of direct letters of commitment is much more efficient in terms of demands placed on USAID management and its accounting staff than the previous system using bank letters of credit and a relatively low minimum request.

DLOCs appear to be cost effective at the mission level -- US\$50,000 in staff salaries compared to the US\$250,000 in bank commissions paid under the BLOC. They place only a minor additional burden on the Paris payments office which mails checks directly to suppliers. System changes have saved hundreds of thousands of dollars in development resources and therefore direct letters of commitment should be given first consideration in future CIPs. Nonetheless, some importers still found procedures led to inordinate delays and were totally unrealistic in terms of the amount of paperwork required. One dealer suggested that a local agency be set up in Zimbabwe to handle the paperwork and thus expedite imports.

6. There may be equity implications in the change from US\$10,000 to US\$50,000 as the minimum allocation under the program. This change may have prevented smaller firms from making use of the CIP.

While the ZASA CIP is probably not large enough to change dramatically the concentration index within the commercial agricultural sector, larger CIPs or a large number of CIPs with high limits, even if funded by diverse donors, might have that effect. The issue needs to be considered by AID and other donors and weighed against the higher costs of running CIPs with lower minimum allocations. Higher concentration ratios within the commercial sector are indicative of less competition and eventually could lead to higher prices.

## **Recommendations**

The main task recommended for action within the life of the present project is to:

- Complete the computer program for project accounting.

Even though the current ZASA CIP program is basically finished, very little can be concluded about projects nos. 607 and 607A. The computer program fails to include categories and breakdowns which are most important to USAID in monitoring and assessing project success. Since ZASA is unlikely to be the last CIP funded by AID in Zimbabwe, or in the region, the required programming work would be useful even should no further funding be available for new or extended programs.

## **Lessons Learned**

While ZASA is completed, should future USAID or other donor funding become available, the unique multiplier and leveraging characteristics of this type of funding indicate that:

- A new CIP program focussing on the agricultural sector and modeled along the lines of ZASA would make excellent use of scarce resources.

Since the original program authorization was US\$62 million, one option might be to fund an extension of ZASA up to the level of the original authorization.

Any future ZASA-type CIP program should include the following:

1. Provision for enhanced policy dialogue around exchange rate issues in the context of GOZ's current openness to discuss much-needed economic changes
2. Assignment of priority to employment generation in CIP allocations
3. Allocation of a portion of CIP funds to the public sector in view of the effective use made of such resources in the past

Specific lessons for future programs follow.

## **Policy**

- 1) Any future CIP program should be targeted to the agricultural sector given the productivity of this sector, its ability to generate substantial foreign exchange per dollar of CIP funds provided, and the generally labor-intensive nature of the sector compared to other sectors.

The agricultural sector is the most appropriate one on which to focus such a program because 1) it generates exports of 4.8 times, as a sector, (and up to 12 times in some subsectors such as coffee) the value of foreign exchange allocations provided by the GOZ (according to figures provided by CFU); 2) it generates considerable employment; 3) public sector investments of foreign exchange have permitted communal farmers to participate effectively in the marketing of export crops (coffee, cotton and maize), producing higher farm incomes and increased employment, as well as more foreign exchange; and 4) agricultural sector employment generation, increased farm incomes, and foreign exchange generation is higher per dollar of foreign exchange used than is the case in other sectors such as manufacturing and mining. For example, the decision to include mining and transport in no. 607 appears to have been an ad hoc decision rather than one corresponding to the basic rationale of the agricultural sector assistance program. Thus, the agricultural sector, including both private and public sector allocations, would be the logical sector to which to restrict funds in a future CIP program, particularly if the volume of funds available is limited.

- 2) Priorities should be set within the agricultural sector which
  - Maximize equity as well as growth
  - Favor labor-intensive subsectors within agriculture
  - Make public sector CIP allocations for activities which are profitable
  - Support communal and resettlement farmers to the greatest extent possible

- 3) Any new CIP should be established only on the basis of an exchange rate that more closely reflects the opportunity cost of foreign exchange.

The ZASA CIP has been a powerful tool in providing for some of the foreign exchange needs of private and public sector businesses, even in the face of increasingly inappropriate foreign exchange policies. In the light of a new willingness on the part of the GOZ to address these issues and work toward their resolution, a new CIP is needed now more than ever to support these initiatives. With the GOZ beginning to allow export-oriented sectors, such as tourism and agriculture, to retain part of their foreign exchange earnings (5% in the case of coffee exporters) for use in supplying part of their foreign exchange needs, it would be appropriate for USAID to supplement these retentions with additional foreign exchange channeled through a CIP.

- 4) Any new CIP should facilitate a policy dialogue in view of new conditions, despite the failure of a policy dialogue to emerge between the GOZ and USAID, at least within the ZASA framework.

There is a new willingness on the part of the GOZ to adopt policies leading toward economic liberalization and to question the means of implementation of past overall policies which have failed to achieve desired results. The basic policy issue in conjunction with a new CIP should be the question:

- Why is a sector which is a large net producer of foreign exchange chronically short of the foreign exchange it needs to increase production of both domestic food crops and export crops, and thus more foreign exchange. This problem derives from the mechanism for allocating foreign exchange within the economy and on the overvaluation of the Zimbabwe dollar, which rewards imports (for those able to obtain foreign exchange at the subsidized official rate) and penalizes exports. The agricultural sector as a whole, and the commercial sector in particular, would benefit from any move towards a market-determined exchange rate and the reduction of administrative control over foreign exchange transactions. Any new CIP program should consider this the principal point of policy dialogue with the GOZ and of program design.
- 5) A foreign currency auction system for CIP funds should be examined as an acceptable productive interim step toward eventually freer, market-determined exchange rates.

In view of the substantial overvaluation of the Zimbabwe dollar with respect to foreign exchange (US dollars and other major currencies), and until steps are taken to bring the exchange rate for the Zimbabwe dollar into closer alignment with those currencies, any future commodity import program should auction available CIP foreign exchange funds among all eligible applicants, with limited funds going to the highest bidders. This system would replace the administrative rationing of foreign exchange by MIC, which is invariably and inescapably somewhat arbitrary and which contains within it the potential for illicit gain by those doing the rationing.

Thus if US\$5 million were available in a tranche and eligible applicants presented requests for US\$15 million, the applicants themselves would be allowed to bid for the foreign exchange they need, with the highest bidders awarded the foreign exchange until the entire tranche was exhausted. If a US dollar were worth Z\$4.5 to one firm and only Z\$2.5 to another, firms making the highest offers would receive their requested foreign exchange, those with slightly lower bids might also receive their allocations until the total available foreign exchange was exhausted. Such a system

would maximize local currency generation for use in attacking small farmer constraints and thus would also benefit the local currency side of the program. In addition, it would be a step toward establishing an eventual free market in foreign exchange. It should be noted that this system has been used effectively in many developing countries which face foreign exchange shortages, but are unwilling to devalue openly. The overvaluation of foreign exchange and its impact on investment in agriculture and in employment generation are legitimate areas for ZASA-promoted policy discussion that the introduction of a foreign exchange auction system might promote.

The amount of additional local currency generated would be considerably higher than that currently being generated at an exchange rate pegged officially at Z\$2.58 per US\$1 in December 1990; concurrently, the black market value of the US dollar was at least Z\$5 per US\$1. The shadow foreign exchange rate used by the Government to analyze its investment projects is not publicly available. However, an approximate estimate is that it lies in the neighborhood of Z\$3.75 per US dollar; one marketing board uses a figure of Z\$4 per US\$1. If firms were willing to bid Z\$3.75 per US\$1 on average, local currency generation for distribution by the ZASA Working Group would be increased by 45% for each tranche of foreign exchange auctioned. This system would make more local currency available to finance development projects. It would also give the Working Group a legitimate reason to be involved in the policy dialogue generated by the CIP side of the program, since the amount of local currency generated for small farmer development projects would be determined by the effective exchange rate.

6) The eligibility criteria for participation in a future CIP should be re-evaluated in the design of new projects, and periodically thereafter.

In the present program general support for the agricultural sector has, by implication, supported capital-intensive rather than labor-intensive investment, as a consequence of overvaluation of the exchange rate. In any future program, criteria should be specified explicitly and be subject to periodic review either by the ZASA Working Group or bilaterally by the GOZ and USAID and redefined when necessary.

7) For equity reasons, it is desirable to reduce the minimum of US\$50,000 for CIP participation if a system could be designed which minimizes management costs both for USAID and MIC.

Such a change might be more equitable in that smaller firms could reap some benefits from the program. In addition, a lower minimum would stimulate competition, which is normally desirable. The US\$50,000 limit was introduced as a screening mechanism to reduce workload, which it has effectively achieved. It has done so, however, at the price of making it impossible for small firms with smaller, but nonetheless pressing, foreign currency needs to participate in the program.

## Procedures

Procedures under project no. 607A represent a major improvement over those used previously under nos. 604 and 607. Nonetheless, additional improvements could be made to streamline the application and approval system. For example:

1) FAXed proformas should be acceptable to speed the application process. Only after selection should applicants be required to provide original proformas.

First, this change would reflect how import business is generally handled in the 1990s. Second, DHL or other couriers charge more for their services than is the cost of sending the same number of pages by FAX; some US exporters may not want to incur such expense except in response to a firm order. Third, the whole application process would be speeded up dramatically.

- 2) The feasibility of a system which makes use of the local banking system, rather than either the BLOC or DLOC system, should be examined.

In view of the well-developed nature of commercial banking and of the knowledge of major importers in Zimbabwe concerning the procedures necessary both to guarantee payment to suppliers and to assure importers of receipt of the specified type and quality of goods, tranches of CIP funds could be paid into a special account at the Reserve Bank. Then a local commercial bank selected by MIC and USAID could handle transactions directly. Such a system would reduce the management burdens of both institutions compared to those of either system used in the past.

- 3) Priority should be given in CIPs to purchasing equipment for which US manufacturers have a comparative advantage, such as tractors and combines.

This would ensure that the program would not encourage purchases of more costly or less efficient US equipment simply because the foreign exchange was available to "buy American."

In summary, the ZASA CIP at its inception chose to support growth with equity within the agricultural sector. ZASA program implementation encouraged growth in both the commercial and communal sectors, and increased income in the communal areas through increasing marketed production and greater employment. The program was effective, relatively efficient, and disbursements were rapid. A future CIP program modeled on the lines of ZASA would need to delve more deeply into economic management and into how specific projects and the way that they are implemented achieve both growth and equity, particularly in the face of changing conditions. Thus there is a need for greater policy dialogue than in the past, including such issues as exchange rate policy, price and procurement policies for products controlled by the marketing boards, land tenure and settlement issues, and other problems affecting growth and employment in the agricultural sector. Without a resolution of the issues which affect both the commercial and communal sectors, the objective of growth with greater equity will be unachievable.

## Chapter 1

**Agricultural Research****Including Veterinary Science****Concept and Objectives**

Zimbabwe has a long and successful tradition of agricultural research. Its complex research establishment and a relatively sophisticated research program have resulted in some of the most productive agricultural operations in Africa. Until Independence, however, this program supported almost entirely large-scale, commercial operations. In the past decade research initiatives have been reoriented to benefit the smallholder in communal areas. ZASA support has facilitated this reorientation, adding to the major support provided by other donors. Specifically, ZASA was to support research aimed at overcoming the constraints faced by smallholders, including increasing the productivity of traditional and cash crops, particularly in low rainfall areas, and seeking means of applying private sector expertise to smallholder needs.<sup>23</sup>

**Findings****Background and Context**

Commercial agriculture required 60 years of government funded research, extension, veterinary services, farm management, and state trading and subsidies before becoming profitable. This was so despite the fact that commercial farmers had access to capital, irrigation, modern technology, and scientific know-how which they had brought with them from the western agricultural world. During the period of sanctions the commercial sector exhibited its technical and management capacity by diversifying from tobacco and maize into cotton, irrigated wheat, and other crops needed in the local economy. An example of its success lies in the fact that until 1965 Zimbabwe produced about 2% of its annual wheat requirements; by 1976 the country was self sufficient and, in good years, exported small quantities of wheat .

Small farmer agriculture has drawn upon the research base developed for the commercial sector, successfully borrowing packages of improved practices for maize and cotton in those areas where there is sufficient rainfall. This began in the 1960s and resumed with Independence, after disruption by the war.

The research task at Independence was formidable: to find crops suited to largely drier and poorer soils, particularly in natural regions 3, 4, and 5, which would flourish under conditions of high human and livestock pressure. These are areas where access to inputs, technology, and information is limited, making input and marketing costs high.

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<sup>23</sup> USAID, Zimbabwe Agricultural Sector Assistance, PAAD Authorization (613-0209), 9/23/82; Zimbabwe Agriculture Sector Assistance (ZASA) Program Amendment, (613-T-607), 8/9/88:10.

Undercapitalized traditional farmers have only limited capacity for sustainable communal resource management. Moreover, the institution of the village had been frozen under colonial tutelage. There had been no rational adjustment to the shift from a situation of land abundance to land shortage. Instead the adjustment came in the form of growing social stratification, with on average 40% of households owning no cattle, some 30% not ploughing, and those without their own draft power who do plant, losing about half their yield potential due to poor timing of field operations. Because of the subsistence nature of farming and controls over petty trade, there has been little local market activity or cash circulation. The rural areas were and remain today largely a labor reserve for the modern economy, with half the adult male population absent as migrants for large parts of the year.<sup>24</sup>

## Procedures

### Changes in Agricultural Research since Independence

To address the needs of the smallholder the Department of Research and Specialist Services (DRSS) after Independence embarked on a major initiative of on-farm trials in communal areas. New staff had to be trained to replace veteran researchers leaving the organization in the years after Independence. Existing staff had to learn new methods of research useful to smallholder agriculture such as Farming Systems Research, on-farm trials, water harvesting, and arid and semi-arid land systems. According to the DRSS, by 1990 communal area on-farm research constituted 25% of the research effort and consumed 50% of the total annual research budget.

Research priorities are overseen by the Agricultural Research Council which includes representatives of both communal area, small-scale, and large-scale commercial farmers. The Council provides advice directly to the Minister of Agriculture and is thought to have considerable influence on the setting of research priorities.

In addition to government sector research, the commercial farming sector funds research, both independently and in conjunction with Ministry of Lands, Agriculture, and Rural Resettlement (MLARR) research. This includes research which is beneficial directly to smallholders raising cotton, coffee, and other crops, as well as to commercial growers.

Greatly expanded cotton production has been an important development since Independence, particularly in the middle rainfall areas. Now, with water harvesting technologies, cotton is moving into drier areas, particularly on communal lands where production has tripled since 1982. This means shifting beyond the natural cotton zone, moving quantities of soil to effect the harvesting of water, and opening up the likelihood of a cotton monoculture. On poor soils this poses the risk of initial good yields being followed by a drop in production, and potentially impoverished soils. Thus, there has been a continuing need for research regarding cotton's future role in dry and heavily populated communal areas.

## Performance

### ZASA's Role in Supporting Agricultural Research

ZASA was approached by DRSS to support these and related initiatives. ZASA funded small farmer research, staff training, soil surveys, a foot and mouth laboratory, veterinary toxicology equipment, agricultural data analysis, plus specific studies on locust control, castor beans, heartwater, animal wastes, and forestry issues. As indicated in the following table (E.1.1), allocations totaled Z\$ 3.7 million plus US\$ 1.7 million as of 1990, representing 6% of local currency and 14% of US dollar funding within the total ZASA program. While DRSS reported having received all necessary funds on time, the Ministry of Finance records show that 44% of the allocations were recorded by MFEPD as spent by June 1990.

**Table E.1.1**

#### Agriculture Research

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Heartwater Research	DR&SS	84/6	904,903	1,094,515	904,903
Foot and Mouth Lab.	DR&SS	85	120,000		0
Henderson Research Stn.	DR&SS	85	76,500	217,056	76,500
Small Farmer Research	DR&SS/MOE	85	107,800		57,000
Castor Bean Growth*	DR&SS	86/90		28,303	n/a
Animal Wastes Study	DR&SS	87	68,600		32,000
Locust Control	DR&SS	87	300,000		4,836
Plant Insp. Office Const.	DR&SS	90	60,000		n/a
Dip Tanks	Vet. Service	85	1,151,000		492,031
Tsetse Control Camps	Vet. Service	85	600,000		0
Vet. Toxicology Unit	Vet. Service	89	6,000		250,000
Vet. Toxicology Reagents	Vet. Service	90	25,000		0
Agric. Data Analysis	MLARR	86	30,000		100,000
USDA Technical Exchange	MLARR	90	8,000		19,582
Microfiche Libraries	ADA	85/6		12,600	n/a
Forestry Research	Forestry Comm.	86	158,000		0
Henderson Aquaculture#	DR&SS	85	36,500		5,027
<b>Subtotal Ag. Research</b>			<b>3,652,393</b>	<b>1,702,474</b>	<b>1,597,879</b>
	<b>Percent of Total</b>		<b>6%</b>	<b>14%</b>	<b>44%</b>
			<b>of tot. Z\$ alloc.</b>	<b>of US\$ alloc.</b>	<b>of Z\$ allocated**</b>

Source: USAID, MFEPD, November 1990

\* MFEPD shows a US\$28,303 allocation while DRSS reports US\$32,500 of which \$27,752 had been spent by 1989; the balance was reported as probably not being used.

# MFEPD shows an allocation which does not appear on USAID records.

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

Both the Dept. of Research and Specialist Services and the Dept. of Veterinary Services consider ZASA-funded research to have been critical to the progress each has made during the past decade. While ZASA funds have been a small proportion of total departmental budgets, and a number of on-farm activities have been curtailed before pay-off, they have, nevertheless, had a definite impact on research related to small

farmer, heartwater, foot and mouth, veterinary toxicology, castor bean, and agricultural data analysis.

Small Farmer Research directly supported DRSS efforts to shift attention from the commercial to the communal sector, particularly for hybrid maize, water harvesting, and cotton breeding. Heartwater research, undertaken with the assistance of the University of Florida, has almost achieved the development of a vaccine for controlling one of the most serious tick-borne diseases, one that poses a threat not only to both commercial and communal farmers in Zimbabwe and other parts of Africa, but also potentially to herds in the US and Caribbean, where research could not be conducted. Foot and mouth research has helped control that disease, resulting in good control of the disease among communal livestock.<sup>25</sup> This has directly contributed to the EEC's lifting of its ban on meat imports from Zimbabwe during late 1990.

Similarly, toxicology research has made it possible to test for pesticide residues in beef, enabling further exports to the EEC. Castor bean research began with a ZASA grant that enabled essential seed imports. By 1990 this castor bean investment had resulted in further funding by ICRISAT, AFC and two private firms, in adoption of castor bean in at least two different parts of the country, and in farmer interest in six other areas. AGRITEX now features it in its extension programs for semi-arid regions.

## **Impact**

### **Efficiency**

The Dept. of Research and Specialist Services reports that the ZASA application and disbursement system has generally proved efficient, timely, and able to respond relatively quickly to changing circumstances that dictate the need for new research priorities.

A particularly good example of the efficiency of the ZASA model is the funding of a locust control project with both research and extension implications. In 1987 the country faced an emergency with an imminent locust outbreak and no government funds were available on short notice due to GOZ's need for advanced programming. ZASA provided Z\$300,000 and, together with ODA (UK), quickly came up with the necessary funds, making the appropriate research and extension response possible to ameliorate a serious problem. As a result, GOZ recognized this need and funded a Z\$450-500,000 line item in subsequent budgets for pest control in emergency situations.

With regard to the efficiency of financial expenditure and reimbursement, however, agricultural research and veterinary service activities faced difficulties. By June 1990 only 44% of their allocations were recorded by MFEPD as expended, somewhat lower than the average of 50%. While projects may have been completed using credits, accounting and reimbursements were generally delayed significantly. (Table E.1.1)

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<sup>25</sup> Foot and mouth disease has yet to be controlled among wildlife.

## Effectiveness

In terms of reorientation of research to the smallholder and of improved productivity of that sector, ZASA investments have played an effective role. The general government emphasis on smallholder research, supported only in a small way by ZASA funds, has led to an overall jump in smallholder production, productivity, and incomes during the past decade. For example, with the help of ZASA and other donors, today 80-85% of the maize planted in communal areas is the hybrid R201 developed by DRSS. Water harvesting is spreading rapidly in drier areas, with small farmers paying cash to have tractors come into their fields to help construct the necessary ridges and contours. Because of direct ZASA support the risk of dangerous diseases and pests that cut agricultural production and exports has diminished, new crops such as castor bean have been introduced, and smallholder production of traditional crops, including cotton, has dramatically increased.

The following table (E.1.2) summarizes government support to research in recent years. It indicates that relative expenditure dropped significantly following Independence, although the rate of decrease has slowed since the ZASA program began in 1983. While firm corroboration is not possible, the data also suggest that relative levels of expenditure for research, given the country's serious budgetary constraints, would have continued dropping rapidly without donor support such as that provided by ZASA.

**Table E.1.2**

**Agriculture Research:  
Government Support to Dept. of  
Research and Specialist Services**

Year	Research Budget/ Total Ag. G.D.P.	Research/Total Govt. Budget	Research/ Total MLARR
1975	1.23%	0.75%	18.0%
1980	1.75	0.56	12.7
1981	1.19	0.36	7.7
1982	1.23	0.37	5.7
1983	1.51	0.29	4
1984	1.38	0.32	3.8
1985	n/a	0.34	4.9
1986	n/a	0.33	4.7
1987	n/a	0.34	4.5
1988	na	0.32	4.1
Average 1980-1990	1.38%	0.40%	7.00%

Research has proven itself a valuable public investment, but the returns are realized only over the long term. Rough calculations suggest that investment in research provides a return of over 30% per annum. However, it is treated in the government budget as a recurrent cost, not as an investment. This leaves research vulnerable to budget cuts and beyond the purview of major donor assistance since it is rarely provided for recurrent expenditures.

New cuts are proposed for 1990/91 which will reduce on-farm research particularly in communal areas because of high travel and subsistence expenses. These activities will be replaced with research on DRSS experimental farms where attempts will be made to replicate communal area conditions. This proposal is of

dubious validity because most experimental farms are located on good land in relatively high rainfall areas in natural regions 1 and 2, which are very different from the majority of communal lands, located in poor soils in low rainfall areas of natural regions 3, 4, and 5. A realistic substitute for on-farm trials has yet to be identified.

## **Conclusions**

Overall, those knowledgeable about the smallholder sector, including officials of the organizations representing both communal and small-scale commercial farmers, uniformly praise GOZ's research efforts and ZASA's contribution to them since Independence. They despair only about the threatened curtailment of small farmer on-farm trials that budget cuts mandate. In the field, and in data on production changes throughout the smallholder sector since Independence, evidence of the value of research initiatives is evident.

- Proposed replication of communal area conditions on research stations located on better soils in high rainfall areas is unlikely to produce the same results as on-farm trials, particularly in low rainfall areas.

As testament to the perceived utility of these efforts, the Zimbabwe National Farmers Union, representing small-scale commercial farmers, donates Z\$10,000 annually for research. Furthermore, the National Farmers Association of Zimbabwe, with 550,000 members from the communal areas, is considering investing some of its modest budget from proposed crop levies in continued research for smallholders.<sup>26</sup>

ZASA funding is recognized by these organizations and DRSS as having contributed to the GOZ's commitment to the smallholder sector. Specifically:

1. Agricultural research in both crops and livestock has yielded substantial returns to the local and national economy, while helping raise smallholder production and incomes.
2. ZASA has been a partner in this process, providing funding targeted at the smallholder sector through a mechanism that operates relatively efficiently and effectively; it has provided funding in a timely manner and improved overall system responsiveness to the needs of communal farmers.
3. On-farm trials have been an important, perhaps vital, component of Zimbabwe's research initiatives, have produced positive benefits, and promise to produce more. ZASA funding has helped DRSS to maintain these trials in the face of overall budget restrictions and has supported a program of small farmer research linked directly to these on-farm trials.
4. ZASA funding has contributed to important advances in heartwater, foot and mouth disease, veterinary toxicology, castor bean, and locust control research, helping to improve agricultural export potential and to increase production and yields for both commercial and communal farmers.

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<sup>26</sup> Government approval is being requested by NFAZ to permit it to receive levies on crops sold by communal farmers in the same way that large- and small-scale commercial farmers unions presently do from the crops marketed by their union members.

5. Timely availability of ZASA funds has made it possible for GOZ to respond quickly to emergency situations, reducing the risk of serious problems for farmers and urban consumers.

## **Recommendations and Lessons Learned**

Overall, it is recommended that:

- ZASA funding, or a similar mechanism, continue to be available to support agricultural research
- The limited remaining funds under the current ZASA program should be used only to complete existing research efforts jeopardized by minor shortfalls

Future funding should be earmarked to support:

1. Smallholder on-farm trials at present or increased levels
2. Matching grant funding to encourage further investments in on-farm trials by government, smallholder organizations, and the commercial sector to make up the shortfall in DRSS appropriations
3. The efforts of the NFAZ to receive a levy on the produce sold commercially by its members to generate funds to tackle research problems specific to the smallholder
4. Development of a national research strategy to improve cotton farming systems to reverse and/or forestall apparently falling yields in established areas
5. Examination of means by which GOZ can change research from the recurrent budget to its rightful place among capital programs where foreign donors, and government itself, would find it easier to provide the funds needed by this high-return activity

## Chapter 2

## Agricultural Extension

Including National Parks  
and Fishing Cooperatives

## Introduction

Three very distinct activities have been funded by ZASA under the agricultural extension constraint area. These include AGRITEX (the GOZ agricultural extension service), the Department of National Parks,<sup>27</sup> and several independent fishing cooperatives. Unlike in the other sections of this report, where it has been possible to group together discussion of ZASA support for various activities, in this section each of the activities will be treated separately due to their diverse nature. All three have the communality of husbanding scarce resources. Fishing cooperatives have developed in most cases as a result of strong extension input from the Ministry of Cooperative and Community Development. National Parks has been linked to these cooperatives in its responsibility for allocating fishing permits which make possible cooperatives' formation and operation. National Parks has had a role in providing extension services in wildlife management and game farming. This is discussed in relation to Model D and also to natural resource conservation and environmental education in Chapter 5, "Land and Water Use."

The following table provides ZASA allocations and expenditures for agricultural extension, National Parks and fishing cooperatives. Overall, these institutions received 11% of local currency and 22% of foreign currency allocations for a total of Z\$6.6 million and US\$ 1.7 million.

Table E.2.1

<b>Agriculture Extension (Incl. National Parks &amp; Fishing Coops)</b>
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Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Agric. Extension	MLARR/AGRITEX		1,616,881	2,459,811	1,539,675
National Parks	MET		4,577,047	190,883	0
Fishing Coops	MCCD		417,258	0	237,258
<b>Total Extension</b>			<b>6,611,186</b>	<b>2,650,694</b>	<b>1,776,933</b>
	Percent of Total		11%	22%	27%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

With regard to the efficiency of financial expenditure and reimbursement, extension activities faced difficulties. By June 1990 only 27% of their allocations were

<sup>27</sup> Dept. of National Parks will be referred to henceforth as "National Parks."

recorded by MFEPD as expended, significantly below the overall average of 50%. While projects may have been completed using credits, accounting and reimbursements were generally delayed significantly.

## **Agricultural Extension**

### **Objectives and Concept**

The GOZ has consistently focused its efforts in extension on improving small farmer production and marketing of commercial crops, often through the provision of information. Because of a long-standing commitment to research dating back to pre-Independence, proven technological packages for growing the principal market crops existed and were soon adapted to the needs and abilities of communal farmers. The primary objective of AGRITEX after Independence was to transfer this technology, plus new research findings directed at small farmer production, to communal areas in a cost-effective way. Within this overall goal, six areas were identified in which ZASA might contribute: the construction of staff housing and transportation, funding for additional staff, development of better extension techniques, provision of in-service training, small farmer linked research and extension activities, and additional facilities, equipment, and budget to carry out extension activities.

### **Findings**

#### **Changes in Agricultural Extension since Independence**

To provide much needed agricultural services to the communal sector, a massive expansion of the agricultural extension service would have been required after Independence to maintain the same extension agent-farmer ratio as had formerly prevailed in serving only the small white-dominated commercial farm sector. This expansion, plus replacement of experienced extension professionals who left the service, would have required a tremendous expansion of the agricultural colleges and their staffs. Much of this increased infrastructure and human resource capacity would have been wasted after the extension service's initial expansion. At that point, the demand of commercial agriculture for farm managers, plus other requirements of the agricultural sector, both public and private, would have been greatly exceeded by the supply of graduates of the agricultural colleges and the Faculty of Agriculture of the University of Zimbabwe.

Instead, AGRITEX has expanded more modestly, from about 1200 staff in 1980 to the current level of 1600 staff. This has been achieved with a relatively modest increase in training capacity. Nationwide the farmer/extension worker ratio has been reduced modestly from 1000:1 at Independence to 800-850:1 in 1990, while the number of households in the communal sector has grown from about 600,000 to 900,000. Despite this, AGRITEX has provided reasonably effective service to the farming community through a combination of good organization, effective communication, efficiency and reasonable scale of operations.

The agricultural colleges established a one year on-farm training program in the first year of its three year program, making training more practical and reducing the need for additional staff and facilities. Basically, the second and third year enrollment double without the need for additional staff or facilities.

Furthermore, between 15% and 18% of the extension agents now are women; at Independence, there were none. Some additional dormitory space was constructed at the agricultural colleges provide gender segregated facilities. Staff housing also was built. Nevertheless, massive expansion of the agricultural college system to meet the needs of the extension service was avoided.

At Independence, Zimbabwe had perhaps the best extension system in Africa, even though it was geared to commercial farmers. Thus, the World Bank, IFAD and ZASA were able to support for an existing system reorganized to include servicing of communal and resettlement farmers as well, rather than having to support the creation of a completely new system. AGRITEX came into being in 1981 as the result of the fusion of the pre-Independence extension services with a specific focus of addressing the needs of communal and resettlement farmers as well as those of commercial farmers.

The University, which provides AGRITEX with some staff, also adopted a shorter period of practical field work, one of a few months duration. However, this program has been less successful in reducing the need for expansion of the University staff and installations and improving the practical ability of university-trained graduates than have been the agricultural colleges.

The three levels of extension staff are: professional staff (subject matter specialists catering to the needs of commercial farmers); extension staff at the technical level (in such areas as conservation and investment surveys) serving both commercial and communal farmers; and the paraprofessional extension agents serving the communal and resettlement farmers, working in the local language. Adequate provision of services has required improving the mobility of staff and the ability of agents to communicate among themselves and with the head office for back-up advice.

### Performance

The major direct contribution of ZASA to AGRITEX's extension efforts (aside from its contribution to human resource development at the agricultural colleges and the University (discussed in Chapter 6, "Human Resource Development") was funding worth Z\$1.5 million in local currency and US\$ 2.4 million in foreign exchange costs to purchase a radio and radio-telex system (Table E.2.2). The system provides two-way communications links between headquarters and regional offices and between these and individual extension agents. The links between headquarters and regional offices are both voice and radio-telex, making it possible to send hard-copy in addition to verbal messages. This system complemented transportation provided by the World Bank and reduced the need for additional transportation. It also made extension agents located anywhere in the country more productive by enabling them to obtain information from subject matter specialists.

**Table E.2.2****Agriculture Extension:  
Allocations & Expenditure**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure** to 6/30/90-Z\$
			Local Z\$	US\$	
Communication Radios	AGRITEX	84/90	1,541,881	2,382,911	1,539,675
Murimi Ulimi Magazine	MLARR	85	75,000		0
Jojoba Feasibility	ADA	86		76,900	n/a
Subtotal, Agric. Extension			1,616,881	2,459,811	1,539,675

Source: USAID, MFEPD, November 1990

\*\* Represents allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

**Impact****Efficiency**

The total cost of the communication system was reduced and better use was made of ZASA resources by USAID's decision to allow local currency to be used for setting up the system and to buy those parts of the system which could be supplied by the local Motorola dealer. Thus, elements, such as the antennas, masts, guy-wires, and system installation were purchased locally and paid out of ZASA local currency funds.

In addition, as the table above indicates, AGRITEX has been more efficient in managing the funds involved, having expended and been reimbursed by MFEPD for 95% of the local currency funds by June 1990. The same cannot be said, however, for Ministry headquarters, however, since MFEPD records indicate that in the five years elapsed since funds were allocated in support of the Murimi Ulimi magazine, expenditure had not been recorded as of June 1990.

**Effectiveness**

There have been two major interventions by external assistance agencies: the purchase of motorcycles and vehicles for staff made possible by the World Bank and the establishment of a communications system funded by ZASA. These have complemented each other well and jointly have contributed to the generally successful AGRITEX extension program. World Bank funding for transportation allowed extension agents to get out to their clientele; ZASA funding for communication allowed workers at every level of the extension system to have access to the latest in extension messages and essential administrative communication. Both of these were necessary to the effective operation of the extension service.

The ZASA-funded high frequency single-sideband system covers headquarters, provincial and district offices, and some area offices. The system has some problems since in many areas there is no electricity and batteries have to be recharged outside of the site where the radios are used; furthermore, some of the nickle-cadmium batteries are reaching the end of their useful life since they can no longer be recharged. In Bulawayo, perhaps only 3 out of 10 radios in district areas are working because of battery problems.

A VHF network using hand-held radios in the Umbra area to enhance communication among extension workers. This funding is not presently available. The cost of introducing this system throughout the country, however, would be \$21 million (almost entirely in foreign exchange). This funding is not presently available.

The impact of the ZASA-funded system has allowed AGRITEX to reduce the use of telephones substantially. In 1988 telephone rates went up 126%. In that year alone, the radio system saved Z\$259,000 for post and telephone charges.

### **Agricultural Extension Conclusions**

The ZASA-funded communication system has enhanced the external and internal communications efficiency of the department, improved morale, and enhanced the effectiveness to get technology packages to farmers. Specifically the ZASA-funded system has:

1. Enhanced AGRITEX's capacity to reach farmers with effective messages, providing the organization, with its relatively low extension agent-to-farmer ratio, with an effective combination of communication, transportation, and organization
2. Provided the most remote extension agent with access to the most up-to-date input packages
3. Reduced the need for ground travel for most informational exchange, allowing AGRITEX to make better use of its scarce transportation resource
4. Reduced the need for the majority of telephone calls made at all levels of the extension service
5. Improved morale among agents significantly by enhancing communication between central and provincial officer and agents in even the remotest areas

### **Recommendations and Lessons Learned**

1. New funding is recommended for future extension activities.
2. Remaining ZASA funds which might be made available to AGRITEX should support maintenance and minor up-grading of the radio system. A major effort should be made to ensure that a sufficient number of replacement batteries is available.
  - Staff using the radio system should be held personally accountable for loss of any equipment.
  - Spare radios might be purchased so that agents and regional offices are not left without equipment when repairs are required.

# National Parks

## Objectives and Concept

In recent years, poaching has become an increasingly serious threat to wildlife, particularly rhinos and elephants, and has required an immediate response. The objective of the GOZ in including National Parks in the ZASA program was to provide funding for the anti-poaching campaign. Specifically, USAID agreed to use ZASA resources for radios and, subsequently, for staff housing in areas particularly vulnerable to poaching.

## **Findings**

### Performance

National Parks received from ZASA Z\$577,000 for a radio system for anti-poaching patrols and Z\$4 million for housing for anti-poaching staff, the second largest local currency allocation made by the program (Table E.2.3). The radio system combines base-stations and hand-held sets and allows command posts, such as the one established at Mana Pools, to maintain contact and coordinate activities with anti-poaching patrols throughout their respective sectors of the national parks. Approximately 60 houses have reportedly been built in a number of remote locations. Given the isolation of the area, the rough nature of the work and low staff salaries, it is necessary for National Parks to provide good housing in order to retain qualified people. According to National Parks, there is a need for 1600 additional houses for its staff.

**Table E.2.3**

### **Extension: National Parks**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Communication Radios	MET	86		190,883	n/a
Zambezi Anti-Poaching	MET	86	577,047		0
National Parks Housing	MET	88	4,000,000		0
<b>Subtotal, National Parks</b>			<b>4,577,047</b>	<b>190,883</b>	<b>0</b>

Source: USAID, MFEPD, November 1990

\*\* Represents allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

## **Impact**

### Efficiency

Questions have been raised concerning the appropriateness of the housing built and its cost. National Parks has put up approximately 34 houses at Mukanga and 26 at Tashinga at a cost of Z\$4 million in all.<sup>28</sup> If, in fact, 60 houses have been built, their average cost would be relatively high (Z\$66,667 each). Conditions in the national parks

<sup>28</sup> Despite repeated inquiries, no one in the Dept. of National Parks could confirm the number of houses actually built with ZASA funds.

dictate special housing requirements (higher ceilings for ventilation, larger size, elephant-fencing for the compounds, etc.). Nevertheless, the houses are on the order of 150 square meters for junior staff and 200 meters for senior staff - approximately three times the floor space allotted to other government workers. (GMB, for example, allots clerical staff houses of 55 square meters and managers houses of 70 square meters). While it is true that construction costs are higher in isolated locations than elsewhere, it seems that floor space could have been reduced substantially without having ignored the special needs of the staff.

With regard to the efficiency of financial expenditure and reimbursement, National Parks activities faced serious difficulties. By June 1990 none of their allocations were recorded by MFEPD as expended. While projects may have been completed using credits, accounting and reimbursements were seriously delayed.

## Effectiveness

### Radios

The radio system, besides making more effective use of available personnel, reduces casualties among Parks personnel by bringing in reinforcements to support otherwise isolated patrols. National Parks staff working in the anti-poaching campaign are convinced of the efficiency of the system and of its utility in reducing the numbers of rhinos and elephants poached. The light weight of the hand-held sets makes the patrols more mobile and extends the area they can cover. The principal problem encountered with the sets is that batteries are lost in the bush or at some point can no longer take a charge, but cannot be replaced. An additional problem is that the number of hand-held sets is insufficient because National Parks now frequently coordinates its anti-poaching patrols with the Army and Air Force. While the support of these institutions is an asset, efforts would be more effective if there were more radios for coordinating activities.

In addition to the communication system provided by ZASA, the anti-poaching campaign could benefit enormously from better transport. National Parks for a while used a four-seater helicopter (Bell, and later Alouette) financed by the World Wildlife Fund; however, to make use of its communications capability, it now needs several larger helicopters (UH-1 type) so that patrols can call in reinforcements when they make contact with heavily armed (AK-47s) groups of poachers. Patrols could also make effective use of fixed-wing single- or twin-engine aircraft (minimum size of a Cessna 206) to evacuate sick and wounded staff since the nearest hospital (Kariba) is a three hour drive in the dry season and is often unreachable by road in the rainy season. Because it is reported that 99% of the poachers cross the river from Zambia, river patrols need several 90-125 horse-power outboard motors for the Zambezi River using boats which it already possesses.

### Housing

The houses built near the Mukanga River were nearly finished at the time the evaluation team visited the site. The generator-powered electrical system still had not been put into service.

## **National Parks Conclusions**

- Without underestimating the importance and usefulness of ZASA grants to National Parks, it is not clear which constraint area allocations to this institution are addressing and what their relationship to the agricultural sector is.
- The radio system appears to have been quite useful in improving the effectiveness of the anti-poaching campaign. Additional radios and replacement batteries would make a major contribution, particularly to improving coordination with the outside forces which occasionally work with National Parks' staff in the campaign.
- There has been inadequate project review and an inadequate monitoring system to follow up on the investments, particularly with regard to National Parks housing.

With such a large allocation, it would have behooved the Working Group to have brought in outside architectural expertise, if such expertise were not available within the Working Group. There apparently was no monitoring of construction since National Parks could not report how many houses had been built with the initial ZASA allocation when it came to the Working Group for funding for additional housing, nor was the Working Group aware of the discrepancy between Parks housing and that provided to other government staff.

- Communities have no stake in the preservation of the wildlife in the parks largely because they have no share in the revenues earned from tourism and safaris.

In view of the amount of money the ZASA Working Group has provided to National Parks for the anti-poaching campaign, a small investment in research on how the surrounding communities could be given incentives to help protect the game there against poachers seems appropriate. Many private farmers are changing from raising exotic beef cattle to game ranching, with less environmental degradation and higher potential income. Communal farmers should also be encouraged by ZASA to protect wildlife both in neighboring parks and on communal lands.

## **Recommendations and Lessons Learned**

- Given lack of clear linkages with the agricultural sector, it is recommended that policy decisions be made jointly by GOZ and USAID regarding future participation of the National Parks Department in ZASA programs, particularly if new funding is made available.

If such future participation is deemed appropriate, the following recommendations should be considered:<sup>29</sup>

1. Outboard motors for existing boats are required to address mobility constraints. (Other sources should be tapped for needed fixed-wing aircraft and helicopters. Light planes are required to ferry in supplies, particularly in the rainy season, and to bring out sick and wounded staff. Helicopters are needed to carry in additional

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<sup>29</sup> USAID independently is funding a major regional natural resource management program which may be a more appropriate mechanism for supporting future national parks related activities.

personnel to back up ground patrols when poachers are encountered. Such aircraft should have the capacity to transport at least 5 people in addition to the flight crew.)

2. Mechanisms should be developed to enable communities surrounding the National Parks to share in the revenue of the parks. This would provide local people with an incentive to report poachers, who, in most cases, cross the Zambezi River from Zambia. Research into this issue should begin immediately.
- Remaining ZASA funds under the current project, if sufficient, should be earmarked for the following residual requirements related to ZASA funds already allocated:
    1. Additional radios compatible with those already being used
    2. Replacement batteries for radios now out of service
    3. Sub-division of existing houses into two units; duplexes would still leave each family with more floor space than is the norm for GOZ staff housing

## **Fishing Cooperatives**

### Objectives and Concept

The objective of establishing fishing cooperatives has been to provide self-employment to low-income people living on the shores of Zimbabwe's lakes. These cooperatives were to provide productive and remunerative employment for members both in fishing itself and in fish processing activities. They were to supply high protein products to low income people throughout the country. In the case of Lake Kariba, people displaced by water which rose upon completion of the Kariba Dam in the late 1950s were candidates for inclusion in fishing cooperatives.

### **Findings**

In all there are 18 registered fish cooperatives in the country. Six cooperatives are located around Lake Kariba; a large number of the most profitable fishing cooperatives are on this lake. Members there fish for a small, minnow-sized fish called kapenta, which is dried and sold throughout the country, mostly to low-income consumers. The number of fishing permits in a given area of the lake is based on a stock assessment of the whole lake carried out by National Parks. Assessment is made in terms of a unit of catching power which is associated with a permit. There are 250 units within the lake and all are being utilized. Before Independence, the government favored big companies, which utilize large numbers of units. National Parks is attempting to reallocate these units to cooperatives and people who were dislocated by the rising water; this shift has to be made gradually so as not to create unemployment and to allow companies to reduce the size of their operations in a rational way. To date, cooperatives have received less than 10% of the permits, thus limiting their ability to expand into this lucrative field.

## Performance

Fishing cooperatives received more than Z\$417,000 in ZASA funding basically for the construction and purchase of specialized kapenta fishing boats rigged out with winch-operated dip-nets and fish-finders. (Table E.2.4) The Ministry of Community and Cooperative Development (MCCD) calculates that an investment in a kapenta fishing cooperative (estimated at Z\$300,000 in 1990, up from Z\$140,000 in 1986) pays for itself in the first year of operation. One cooperative (Chawara) made a total investment of nearly Z\$160,000 to become operational. Funding for boats, equipment and shore installations came from the following sources: Z\$62,000 (or 37% of total costs) from ZASA in the form of a five-year, 9.5% interest loan from MCCD; Z\$50,000 from the EEC for buildings, a grant of Z\$33,000 for ship-to-shore radios, plus Z\$10,000 to defray part of the cost of the boat. The GOZ provided a grant of Z\$28,000. Member equity came to just over Z\$16,000 based on monthly contributions of Z\$25 by each of the 16 members; total member equity contributions were equivalent to just under 10% of the total investment. Production managers of both cooperatives visited by the evaluation team had received management training courses of 3.5 months duration in Bologna, Italy, from non-ZASA sources.

**Table E.2.4**

**Extension:  
Fishing Coops**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure** to 6/30/90-Z\$
			Local Z\$	US\$	
Kapenta Fishing Coops	Coop Dept	86	180,000	0	0
KMC Fishing Coops	Coop Dept	89	237,258	0	237,258
<b>Subtotal, Fishing Coops</b>	<b>MCCD</b>		<b>417,258</b>	<b>0</b>	<b>237,258</b>

Source: USAID, MFEPD, November 1990

\*\* Represents allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

## **Fishing Cooperatives Impact**

### Efficiency

These cooperatives, through the efforts of their members and with considerable external donor support, have been able to establish their fishing enterprises. Another cooperative located near Chawara also received a loan from ZASA; when boat prices increased between the time the proposal was presented and the funding was actually released, additional funds were provided. Without this flexibility in the face of rather substantial inflation, the project would have failed.

With regard to the efficiency of financial expenditure and reimbursement, fishing cooperative activities faced difficulties. By June 1990 only 57%% of their allocations were recorded by MFEPD as expended. While projects were completed using credits, accounting and reimbursements were generally delayed significantly.

## Effectiveness

The catch of kapenta at one of the cooperatives averaged just under 30 MT per month for the period between November 1989 and October 1990, a total of 358MT in the course of one year. Assuming dry weight of 33% of fresh weight and 100% sale at wholesale (Z\$4.80/kg), the total catch would have been worth a little over Z\$570,000. The 15 members have been receiving monthly advances in lieu of wages of Z\$400, or about Z\$77,000 annually. One of the two female members of the cooperative was unemployed before the cooperative started and the other earned less than Z\$200 a month; some of the male members earned similar wages although a few had earnings at or above the Z\$400 level. They hire additional workers to help with the fishing, but pay them only a little more than half what members receive as an advance; therefore the wage bill per member for an average of 6 workers at Z\$250 per month would come to Z\$18,000 per year. Boat operating expenses are Z\$1900 and Z\$400 is spent for their vehicles, or about Z\$28,000 annually. Total costs are thus on the order of Z\$125,000, leaving a theoretical profit of over Z\$400,000 per year. In fact, this cooperative has reinvested all profits to buy additional boats (only 2 of its fleet of 3 boats can be used since there is no permit for the third boat) and to set up a small supermarket in the nearby town. Members are planning to diversify even further by buying a beef feedlot operation within the next year. Thus, the MCCD's ex ante estimate of the lucrative nature of kapenta fishing has been borne out.

## **Fishing Cooperatives Conclusions**

- Kapenta fishing has proved to be a highly profitable ZASA investment, one in which cooperatives have been able to engage successfully and members have been able to participate profitably.

MCCD's prior assessment of the profitability of these cooperatives has proved correct. Because of the capital intensive nature of the business, and without the support of ZASA and subsequently of other donors, it would not have been possible to set up this or the other cooperatives engaged in kapenta fishing. The members of these cooperatives are already earning substantially more than they did previously, despite capitalization of most of the profits of the cooperative. Non-members are also benefitting by employment at wage levels approximating those prevailing in the area.

- The capacity of cooperatives to generate a significant volume of employment, except for founding members, has yet to be proven.

There is no tendency to replace members who abandon the cooperative with new members, nor to incorporate hired workers as members. Currently, there is no incentive for founding members ever to permit new people to join, or for hired workers to become full members. There appears little to differentiate the fishing cooperatives from private fish companies, except that the owners/members are local people.

## **Fishing Cooperatives Recommendations and Lessons Learned**

- With new and/or remaining funds, ZASA should consider supporting additional cooperative ventures in kapenta fishing.

In planning for future cooperatives, the following are recommended:

1. Loan periods should not exceed two years and commercial rates of interest should be charged. Because of the lucrative nature of these ventures and their rapid payback period, five-year loans are inappropriate, as are subsidized interest rates.
2. MCCD should investigate new mechanisms, in the form of articles of incorporation of fishing cooperatives, which make it possible for the benefits of successful cooperative ventures to be spread more widely--among employees and/or additional members. Until such a study is finished and appropriate procedures established for spreading benefits, no further funding should be provided for these cooperatives. ZASA funding of such a study would be appropriate.
3. As soon as appropriate procedures have been developed for incorporating more people into the cooperatives with full membership rights, National Parks should be encouraged to transfer fishing permits to cooperatives as fast as is feasible. It might also want to commission a study on the fishing capacity of Lake Kariba (and of other lakes) on a maximum continuous yield basis to see if the number of permits issues could be increased.
4. Support should be provided to rural people wanting to set up cooperative fishing for species other than kapenta, or on lakes other than Lake Kariba.

## **SECTION C**

## **LOCAL CURRENCY PROGRAM**

### **Chapter 3**

## **Agricultural Credit**

### **Concept and Objectives**

The GOZ felt the extension of credit essential to enabling the adoption of proven technological packages of improved seed and farm chemicals by small farmers and was a central element in the strategy to improve production and incomes in the communal sector. Experience had shown that credit had been crucial in the technological transformation of commercial agriculture and an effective system for channeling credit to commercial farmers (the Land Bank) was well in place at the time of Independence. Its successor, the Agricultural Finance Corporation (AFC) seemed the logical choice for managing farm credit for this new clientele of small farmers in view of AFC's past successful management of credit for the white commercial farmers. Small farmer credit was to be provided through cooperatives and farmer groups or organizations in order to reduce transaction costs for both the individual farmer and the lending institution. The cooperatives themselves also needed financing for inventories of farm inputs if these were to be available in the communal areas.

### **Findings**

#### **Background and Context**

Institutional lending to small farmers before Independence was relatively low (Z\$1.1 million) and was ended in 1978. There also was some lending by a Catholic charitable agency (Silveira House) which was minimal. Institutional lending by AFC to the communal sector began in 1980/81 and to the resettlement sector the following year. The number of borrowers and the amount lent to the communal sector increased phenomenally after Independence from no lending in 1979 to Z\$4.2 million in 1980/81. It reached a peak in 1986/87 when over 77,000 loans were granted to communal area farmers with a total value of Z\$60 million. (Table E.3.1)

Table E.3.1

**Number and Value of AFC Loans Granted  
by Sector, 1979/80 to 1990**

YEAR ENDED (March)	Lg. Commercial		Sm. Commercial		Resettlement		Communal		GRAND TOTAL			
	No. Loans	Loan Value Z\$mil.	No. Loans	Loan Value Z\$mil.	No. Loans	Loan Value Z\$mil.	No. Loans	Loan Value Z\$mil.	No. Loans	Loan Value Z\$mil.	Real Value Z\$mil.	Defl. Factor (CPI)
1979/80	2233	75.6	4348	1.7	0	0.0	0	0	6581	77.3	80.5	0.96
1980/81	2526	86.9	3333	3.7	0	0.0	18000	4.2	23859	94.8	94.8	1.000
1981/82	2103	88.8	3649	4.6	911	0.5	30150	10.1	36813	104.0	91.2	1.140
1982/83	1645	88.7	2953	4.5	4154	1.5	38912	13.2	47664	107.9	83.0	1.300
1983/84	1400	110.2	3052	8.1	19874	10.6	50036	23.4	74362	152.3	97.6	1.560
1984/85	1484	110.3	2744	8.7	19926	10.7	65793	32.0	89947	161.7	88.8	1.820
1985/86	1308	113.0	2569	11.5	13866	8.5	77526	38.9	95269	171.9	86.8	1.980
1986/87	1007	94.9	1910	9.6	11800	8.6	77384	60.0	92101	173.1	76.6	2.260
1987/88	990	111.2	1542	6.8	11217	9.0	69885	49.4	83634	176.4	69.7	2.530
1988/89	900	117.4	1140	5.3	7022	5.9	57679	41.3	66741	169.9	62.7	2.710
1989/90	969	136.3	844	4.5	5193	5.9	43846	33.4	50852	180.1	58.9	3.057

Source: Agricultural Finance Corp., Bi-Annual Statistical Digest, March 1990

Note: Deflator based on Urban CPI for 1980-1988 from Eurostat, Report Zimbabwe 1990; deflator for 1989 from MFEPD, Economic Intelligence Unit.

Subsequently, both loan volume and number of borrowers fell dramatically as the AFC retrenched its lending to communal borrowers due to serious repayment problems. Between 1985/86 and 1989/90, in two of the five years repayment was less than 50% of the amount disbursed, in two of the years less than 60%, and only in 1988/89 did repayment reach 77% of the value of loans made. These repayment rates led to losses varying from 10 to 59 cents per Zimbabwe dollar of money lent to communal sector farmers. On the other hand, the AFC made a profit of between 5 and 8 cents per dollar on loans to the large-scale commercial sector, whose loan volume continued to rise following Independence. (Table E.3.2)

Table E.3.2

**Repayment Rates for Short-Term AFC Loans  
By Farm Sector, 1985/86 - 1989/90 (Percent)**

Type of Farm	1985/86	1986/87	1987/88	1988/89	1989/90
Large-Scale Commercial	109%*	108%*	78%	98%	90%
Small-Scale Commercial	87	70	61	132	106
Communal	56	54	40	77	42
Resettlement	88	56	38	117	73
Total	95%	88%	67%	95%	82%

Source: Calculated from data provided by AFC to Mission, November 1990\*

Notes: Calculations based on (Repayments/Disbursements)\*100

\* Repayments include interest and therefore can exceed 100%.

In addition to individual and group loans to small farmers, shortly after Independence the AFC began lending to cooperative unions out of its own resources to provide working capital for financing inventories of inputs for communal areas. The agricultural marketing and supply cooperatives had provided these essential services to the agricultural sector since before Independence. Farmer-owned cooperatives and cooperative unions, therefore, were seen as a central element in the strategy to get farm inputs out to communal areas. Some weaknesses in the credit unions were noted from

the starts in part the result of uneven financial management and in part emanating from relatively high commercial interest charges paid for loans from private banks. Lending to finance input inventories appeared to be on a sound basis, since cooperative unions then sold inputs to farmers and thus should have been able to recoup their investments within 90 days.

## Procedures

Assisting cooperative unions constituted only one part of an overall strategy to raise production in communal areas through better input supply. Until the 1984/85 marketing season, cooperative unions had a monopoly on input supply as well as on bulking production for transport and sale to the GMB in communal areas. Thereafter, private companies were allowed to market farm inputs and began to compete in this market with the cooperative unions while the GMB (with substantial help from ZASA) began expanding its network of depots into communal areas. In so doing, it took over, to a large degree, the purchasing function which had been carried out by the cooperative unions. In some areas fertilizer companies for which the cooperative unions were dealers entered into direct competition with them, selling fertilizer and other farm chemicals themselves. In addition, USAID, through another program, financed 400 supply and product depots and 40 warehouses, though these were without a sound institutional base.

The AFC requested a Z\$2 million allocation from ZASA, beyond the resources that it was already providing, to set up a revolving loan fund for the cooperative unions; this request was approved in July or August 1984. A request by Silveira House for funding for small farmer credit was turned down by ZASA because members of the Working Group felt only items in the government's Public Sector Investment Program (PSIP) should be funded.) (Table E.3.3)

**Table E.3.3**

### **Agriculture Credit: Allocations and Expenditures**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Cooperative Credit	Coop Dept./AFC	85	2,000,000		2,000,000
AFC Internal Audit	Agric. Finance Corp.	86	44,000	13,500	n/a
Subtotal. Ag. Credit			2,044,000	13,500	2,000,000
	Percent of Total		3% of tot. Z\$ alloc.	0.1% of US\$ alloc.	98% of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

## Performance

The AFC currently has a substantial number of problems. AFC's cost of funds for this program (the rate at which it receives the funds from the GOZ) has been 9.75%; it makes its loans at 13%, providing a spread of only 3.25%. The lending rate has been unchanged since April 1984; except for special programs, the interest rate is the same for all loan terms and all categories of borrowers. Even without taking into account

uncollectible loans, which appear in Table E.3.2 (above) and are substantial, especially in the communal and resettlement sectors, the spread is clearly insufficient to cover AFC's operations and administration costs, which are 4.4% of the value of the total loan portfolio. There is no adjustment for inflation; if the real value of the AFC loan portfolio were to be maintained, an annual adjustment equal to the rate of inflation would have to be added to the rate of interest charged; inflation was 12.8% in 1989 and is estimated officially to be about 25% this year. Furthermore, the charging off of 0.3% of the value of the loan portfolio as bad debt in 1989 seems totally insufficient given the repayment problems. Thus the AFC is accruing interest payable, much of which it is likely never to receive, including a large part of the Z\$25 million in short-term debt which was rescheduled through 1989. The AFC is also losing loan business with large-scale commercial farmers (who have the highest repayment rates of all borrower groups); just after Independence, over 2500 large-scale commercial farmers received AFC loans dropped to under 1000 in the 1989/1990 crop year. (Table E.3.1, above)

Despite these problems, the AFC has properly managed the resources provided by ZASA for financing the input inventories of the cooperative unions. The initial funds, augmented somewhat from other sources, continue to finance the availability of farm inputs through the unions in communal areas. The results of the availability there of these inputs, financed in part by the AFC based on funding from ZASA, are visible in the phenomenal increases in production of maize, cotton and other crops. (These increases are described in detail in Chapter 4, "Marketing and Input Supply.")

## **Impact**

### **Efficiency**

Over the years, low wages, poor staffing and management problems afflicted many of the cooperative unions. Eventually these problems led to losses in several of the weaker unions. Exogenous factors also contributed to the problems of the cooperative unions, including the loss of business on the input side to private fertilizer dealers and on the product side to direct sales to the GMB and to USAID-funded depots. Three or four of the cooperative unions have defaulted on their loans with AFC for a total of approximately Z\$0.5 million out of the Z\$2 million allocated by ZASA. To keep this in perspective, the cooperative unions' repayment rate of around 75% is much better than that of AFC's loans to the communal sector directly and about equal to the repayment rate of resettlement farmers (74% over the last 5 years). The cooperative unions in default are under receivership by the Ministry of Cooperatives. It is attempting to rehabilitate them through a combination of new management, training in cooperative management, and higher staff pay to encourage better performance.

With regard to financial expenditure and reimbursement, credit programs were among the most efficient in the ZASA portfolio. By June 1990 98% of their allocations were recorded by MFEPD as expended. (Table E.3.3, above) While other programs may have experienced delays in obtaining funds through MFEPD this appears not to have been the case for AFC and coops.

### **Effectiveness**

## Cooperative Unions

ZASA funding did provide a major impetus to AFC's provision of working capital to the cooperative unions, whose number rose from 13 at Independence to 19 registered with the Department of Cooperatives in 1990. The availability of additional working capital for the cooperative unions permitted a greater level of input inventories for member cooperatives and, especially in the early years following the ZASA grant, is partially responsible for a 332% increase in small farmer maize production in the two years following the grant compared to the two years prior to it.

In part because of the greater availability of inputs from the cooperative unions, the number of agricultural marketing and supply societies (primary farm cooperatives) rose from 340 in 1980 to 642 in 1987 with a total of 125,000 members. At one point cooperative unions handled nearly 90% of input supply to communal areas; they currently handle about 25% of input supply and 10% of the farm products marketed in communal areas; a substantial part of this is financed by the AFC's revolving fund made possible initially by a grant from ZASA. Total volume of cooperative union operations reached Z\$100 million in 1986/87, but fell to Z\$50 million in 1988/89.

Loans by the AFC to the cooperative unions have always been greater than the amount provided by ZASA, since even before receiving the grant, the AFC provided funding out of its own resources. AFC's lending to the cooperative unions ranged from a low of Z\$1 million in the first year to peak the following year at Z\$5.5 million. (Table E.3.4) AFC's 1989 Annual Report notes loans for the 1988/89 crop season of Z\$4 million to a total of 13 cooperative unions. Regarding loan disbursements and repayments, between 1985/86 and 1988/89 (years known to be complete), repayments were 97.7% of disbursements.

**Table E.3.4**

**Disbursement to and Repayments  
from Cooperatives (Z\$000)**

Years	1985/86	1986/87	1987/88	1988/1989	1989/90
Disbursements	1,011	5,575	2,562	3,328	3,544
Repayments	-	5,981	2,661	4,115	269

## Internal Audit

ZASA also provided a grant of Z\$44,000 and US\$13,500 for improving the internal auditing capacity of the AFC. Training was under the direction of Price Waterhouse. The initial course was in basic auditing skills and was followed by courses in value for money auditing, management of auditing, and applications of data-processing to the audit function. These were the first such courses in auditing held by the AFC.

Internal audit training was provided not only to AFC, but also to CMB, DMB, GMB, ADA (then ARDA) and CSC. The number of participants varied from 26 in the basic auditing skills course to 12 each in the money auditing and auditing supervision courses, 16 in the higher level skills course and 22 each in courses on basic electronic data processing (EDP) and EDP applications to auditing control. (In 1983 the AFC had received a CIP allocation of approximately US\$80,000 for augmenting the disk-storage

capacity of its computers to handle the larger loan volume.) The AFC now takes the lead in providing training in internal auditing, including EDP applications, for its own staff and for other public sector agricultural marketing boards and agencies with which it works closely to help ensure they provide for the financial needs of their clients. It should be noted that the AFC depends on many of the boards to collect its loans through stop-orders under which farmers receive no payments whatsoever for products marketed through the marketing boards until deductions have been made to pay off loans from the AFC. Thus the AFC benefits directly from the training in audit control which it provides to these institutions.

## **Conclusions**

- The goal of increasing the supply of improved seeds and farm chemicals in communal areas has largely been achieved; ZASA's funding of input inventories for cooperative unions through its Z\$2 million grant to AFC has provided part of the funding for a process of change which has brought modern technology to the areas.

The AFC continues to fund cooperative unions providing adequate service to their member cooperatives, and the Ministry of Cooperatives is attempting to rehabilitate those unions which have been unable to continue operating on their own. The fact that the cooperative unions have recently lost market share to private suppliers (which may have something to do with the financial losses of the unions) should not be interpreted as a failure of the program. Rather the unions have contributed to the creation of demand for technological inputs coming out of an innovative program which the private sector, on its own, could never have initiated. Now that the market for such inputs has been created in communal areas, private traders are able to try to capture the more profitable segments of that market. It may still be worthwhile, even at the risk of some losses, to continue to support the stronger cooperative unions to expand service into more marginal areas not currently served, where cotton production is now increasing using new varieties and water-harvesting techniques recently developed in research programs.

- AFC has become the lead agency in providing further auditing and procedures training to other public sector agricultural boards and agencies because of the internal audit training made possible by a grant from ZASA.

Thus a program which might not have been started without the external funding provided by ZASA is being continued and expanded using AFC's own resources, benefitting numerous other agencies.

- Problems regarding loan repayment and interest rates which do not cover inflation, and operations predicated on an assumption of continuing GOZ subsidies need to be addressed by the AFC and GOZ as quickly as possible.

These decisions need to be made in light of the overall structural adjustment of the economy; such a discussion would form an important element in policy dialogue between USAID and the GOZ in any future program such as ZASA. In fact, movement toward positive interest rates in small farmer lending constituted one of the evaluation criteria laid down for the ZASA program, but this has not been achieved. It is not at all clear whether this matter was ever discussed, at least within the ZASA framework.

## **Recommendations and Lessons Learned**

No further funding of credit programs with remaining ZASA funds is envisioned. Under any new funding the following are recommended:

1. The ZASA Working Group should examine carefully any request by AFC for additional funds for cooperative unions to be used in financing inventories of farm inputs. It should weigh carefully whether support should go to cooperative unions with a proven record of success to assist them in expanding their coverage to new areas or to help rehabilitate cooperative unions facing financial problems.
2. Funds should be made available for financing inventories in cooperative unions only in areas where the Ministry of Cooperatives and independent examiners appointed by the Working Group determine that there is a reasonable chance of success. These would be areas in which small farmer needs are not now being adequately served by private sector input suppliers.
3. Credit programs sponsored by NGOs for proven productive activities should be considered for funding by ZASA or future successor programs.
4. Any future program should follow the model of the present program in supporting pioneering efforts in new areas, rather than trying to enlarge market share in areas already adequately served. The drier regions, where new crops such as cotton and, perhaps, semi-arid crops being adapted by ICRISAT are being tried, might well be areas of expansion for the cooperative unions. This might be appropriate since, initially at least, profits are unlikely to be high enough (and the risk of losses too high) to invite adequate levels of service by private sector firms.
5. Any new program should be related to policy dialogue concerning putting lending to all farmers on a sounder basis, one which guarantees the financial integrity of the AFC without having to depend on increasing annual subsidies. Such a dialogue can be effective only within the broader context of economic liberalization. Such a shift should include relaxing exchange controls since the mass of Zimbabwe dollars trapped within the country guarantees that market interest rates will remain at a negative level as long as no viable alternative use for local currency exists within the economy.

**Chapter 4****Marketing and Input Supply****Concept and Objectives**

One of the major objectives of the ZASA program was to support the GOZ policy of bringing communal areas into the market in terms of both the use of modern technological inputs and the volume of goods available for sale. Input supply is discussed in the section on agricultural credit, since credit for financing the input inventories of cooperative unions was viewed as the principal mechanism for bringing modern inputs to communal farmers.

Changing the marketing infrastructure of the country -- which had been geared to serving the needs of commercial farmers located in a geographically restricted area -- to serve communal farmers in peripheral regions in all part of the country was recognized as a major task, one for which external assistance of programs such as ZASA would be needed. Despite a good system of main roads, bringing small farmers into the market economy would not be possible without the establishment of market outlets in reasonable proximity to zones where surplus production was feasible if other constraints could be overcome. The institutions which had been so successful in supporting the growth of commercial farms prior to Independence were to be modified and reinforced to provide similar services to communal area and resettlement farmers, without abandoning their original clientele of commercial farmers. Inputs were to be made available to the communal sector through expansion and strengthening of the cooperative movement, which through the agricultural marketing societies was already involved in input supply and marketing. The Agricultural Finance Corporation was to finance input supply by loans to both the cooperative unions to finance their inventories of inputs and to individuals and groups of communal and resettlement farmers.

**Findings****Procedures**

Various marketing boards were well established in commercial areas by Independence; the principal ones were the Grain Marketing Board (GMB), Cotton Marketing Board (CMB), Dairy Marketing Board (DMB) and Cold Storage Commission. Each board had a monopoly in the purchase of products in its assigned product area: GMB bought grains such as maize, coffee, oilseeds (including sunflowers and groundnuts), millet, and sorghum; CMB purchased cotton; DMB bought fluid milk, and the Cold Storage Commission handled live animals both for export and local markets.

The Government first intervened in the local and export markets during the depression of the 1930s in order to support white farmers. By Independence, a half century later, an impressive infrastructure for the collection and marketing of major crops, livestock, and milk had been built up. It was centered, like the white farm areas themselves, along the watersheds with the road/rail and communication networks.

In response to Government policy to extend services to smallholder areas (most of which were located at some distance from collection points), marketing boards sited new depots on the basis of historical production records and collection data from nearby depots. Marketing Boards had been geared to providing their services to surplus producing farmers. Hence post-Independence policy stipulated that organizations serving farmers producing surpluses extend their services to districts with food deficits and where, in the more favored surplus districts, a large proportion of households were deficit producers.

There was an additional complication: since the communal areas were largely in the drier zones, they would show more marked production declines during times of drought than would commercial areas. Another difficulty with the extension of the Marketing Boards as they had developed was that the transport and collection costs would rise significantly as they pressed their services closer to small farmer settlements. Nonetheless, experience with early depots showed that establishment of such a facility encouraged production in surrounding areas. Although farmers traditionally take care of their own requirements for on-farm consumption (particularly for food grains), selling surplus grain just prior to the harvest of the following year's crop and only after they are certain that their own needs will be met from the new harvest, there was evidence that once a new depot was in place, farmers would adjust plantings to increase the size of the expected surplus to be sold to the marketing boards.

### Performance

ZASA dedicated 34% of its local currency allocations and 5% of foreign currency allocations to address the marketing and input supply constraint area. Of this, over two-thirds of the local currency resources and 24% of foreign currency went to support the Grain Marketing Board. The Dairy Marketing Board received 24% of the local currency allocations with no foreign currency allocations. The Cotton Marketing Board received 5% of local currency allocations and 76% of the foreign currency resources. Cooperatives received one percent of local currency allocations and no foreign currency; Z\$2 million in local currency allocations for a revolving fund to finance input inventories is examined in the credit section of this report. (Table E.4.1)

The Agricultural Marketing Authority (AMA) also received over US\$770,000 in CIP funds to purchase computer equipment needed to handle the huge increase in the number of accounts handled by the various marketing boards operating under the AMA and using its central computing system.

Table E.4.1

Marketing and  
Input Supply

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Coffee Storage (Chipenge)	GMB/Coffee	85	200,000		200,000
Coffee Processing Equipmt.	GMB/Coffee	87/8	6,700,000		6,700,000
GMB Inspan Sheds	GMB	85	225,000		885
GMB Rural Depots (I)	GMB	85	1,600,000		1,600,000
GMB Stackers	GMB	85	240,000		231,689
Mutare Bag Depot	GMB	85	1,350,000		1,350,000
Norton Bag Depot	GMB	87		77,000	n/a
Tractors	GMB	87		48,000	n/a
Cleveland Dam G'nut Dep.	GMB	87/8	1,950,000		1,483,811
GMB Rural Depots (II)	GMB	88/90	2,000,000		0
Forklift Trucks	GMB	90		29,250	n/a
Mahuwe Multip. Depot	GMB/CMB	85	470,600		449,977
Forklift Trucks	Cotton Mktg. Bd.	86/7		491,418	n/a
Suswe Prim'y. Mktg. Depot	CMB	88/90	750,000		0
Milk Distribution Trucks	Dairy Mktg. Bd.	86	2,050,000		2,012,358
Milk Distribution#	DMB	87/90	3,200,000		0
Coop. No. 2 Acct'g. Audit	Coop. Dept.	86	200,000		186,000
Coop Marketing & Supply	Coop. Dept.	na	2,000		2,000
Subtotal Marketing and Inputs			20,937,600	645,668	14,216,720
Percent of Total			34%	5%	68%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEPD, November 1990

# Allocated on USAID records but does not appear on MFEPD records

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

### Grain Marketing Board (GMB)

In all, the GMB received 11 separate allocations from ZASA, including one received jointly with the CMB (based on a USAID recommendation to economize by building joint depots). Dividing the cost of that depot equally between the two marketing boards, GMB received allocations in local currency of a little more than Z\$13 million, or two-thirds of the value of all local currency allocations given to address problems in the marketing and input supply constraint area. The largest single allocation to GMB (just over half) went for a single project: the purchase of coffee milling equipment. The coffee industry was facing a capacity crisis limiting growth in production by farmers already growing coffee and virtually excluding new producers in the communal sector from participating in growth in coffee production. The impact of this project is discussed in detail in a case study included in this report. The ZASA local currency fund went to build new depots or expand existing depots, in order to bring marketing facilities closer to the communal farmers.

ZASA local currency funding was crucial to the GMB according to its top management. This appreciation is borne out by the fact that ZASA funding constituted 28% of total donor funding over the 1985-1990 period and 13% of its investment program over the same time. More important than the actual amount of ZASA funding is the fact that it came at crucial times and for essential projects for which there simply was

no other funding source. In some cases it allowed GMB to finish projects started with other sources of funds. (Table E.4.2)

**Table E.4.2**

<b>Marketing and Input Supply</b>	<b>Grain Marketing Board: ZASA Contribution to GMB Investment Program</b>
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Year	Donor Funds (Z\$)			ZASA %	Government Funds (Z\$)		ZASA %
	ZASA Funds	Other Donors	Total Donors		Gvt. Funding	Gvt.+Donors	
1985/86*	6,531,000	4,200,000	10,731,000	61%	9,206,000	19,937,000	33%
1986/87	1,240,000	2,216,000	3,456,000	36%	10,510,000	13,966,000	9%
1987/88	10,355,000	22,387,000	32,742,000	32%	28,655,000	61,397,000	17
1988/89*	11,000,000	34,679,000	45,679,000	24%	46,877,000	92,556,000	12%
1989/90	na	na	na	na	na	na	na
1990/91	2,225,000	16,770,000	18,995,000	12%	38,245,000	57,240,000	4%
Total 85/91	31,351,000	80,252,000	111,603,000	28%	133,493,000	245,096,000	13%

Source: Grain Marketing Board

\* May include one USAID funded project exclusive of ZASA funding

### Cotton Marketing Board (CMB)

The Cotton Marketing Board is the sole purchaser of cotton. Like the GMB, it went through a rapid expansion program after Independence, with facilities aimed at easing marketing by communal farmers. The cotton produced in Zimbabwe is medium upland and the country is among the top three producers in the world in this category of cotton. All of the cotton is hand-picked, which is one of the reasons that it is sought after in export markets. Areas with the greatest potential for cotton production are in natural regions 3 and 4 (predominantly communal areas) where temperatures are sufficiently high and rainfall low enough to make cotton competitive with less drought resistant crops such as maize. Thus in marginal areas, cotton is the most profitable crop overall where there is sufficient rainfall. DRSS has developed new varieties and techniques which may extend the geographical area in which cotton may be grown profitably. Though requiring high inputs of capital and management, cotton does provide the highest return per hectare and per man/day of labor of all communal area crops. As for transportation costs, cotton has the highest value per kilo of any crop which can be grown in most communal areas.

The number of depots has increased from 5 to 16 since Independence. As with the other marketing boards, the focus of the CMB has been on improving communal farmer access to markets for their cotton production. The CMB (and the Cotton Training Center) was the major beneficiary of public sector CIP funds, receiving 86% of all such funds (US\$5 million for ginning equipment). ZASA provided the CMB with Z\$750,000 for the Mutoko Depot (50% of the cost of building it) between 1988 and 1990. An additional Z\$470,600 was allocated for the Mahuwe Multipurpose Depot, which the CMB shares with the GMB. The CMB has also received nearly US\$500,000 from ZASA which were used to purchase 20 forklift trucks for moving and loading bales of cotton. It has also received preliminary approval for Z\$8 million to finance the construction of a replacement ginnery at Kadoma. The CMB has had additional support from other USAID-funded programs. This has been supplemented by ZASA contributing Z\$1.8 million for the Kadoma Cotton Training Center, which is run by the Cotton Growers' Association under the auspices of MLARR.

## Dairy Marketing Board (DMB)

The Dairy Marketing Board has received two allocations from ZASA, both for the purchase of trucks for milk distribution in rural areas. Having saturated the urban market, DMB is attempting to expand its market by increasing its coverage in rural areas. The final amount of the first allocation was Z\$2,050,000, which purchased locally 12 DAF trucks. The second allocation of Z\$3 million in 1990 was for the purchase of additional trucks for milk distribution; this was still in progress in November 1990.

### **Impact**

### **Efficiency**

The marketing boards have reported satisfaction with ZASA procedures and with ZASA's ability to deal expeditiously with requests. When sufficient local currency has been generated to cover projects being proposed for funding, the Working Group, with a representative from USAID has been able, at one meeting, to approve projects it finds acceptable (subject to ratification from MFEPD). According to the management of one major marketing board, most bilateral donors have to refer any major project back to their headquarters and therefore have normally been unable to approve even the most urgent projects in less than a month, by which time cost estimates have often been low. ZASA also was able to respond with additional funding for projects where expected funding from other sources for some project elements failed to materialize or where additional costs had to be incurred to bring projects to fruition. ZASA has permitted many items to be purchased locally that other donors might have required to be sourced from their own country. It has also allowed GMB to cover the costs of its own engineering department in project design, rather than contracting design work with external engineering firms. This flexibility has meant savings of both time and money in the implementation of the projects financed by ZASA.

The CMB also reported satisfaction with the responsiveness of ZASA to its needs; after failing to obtain funds for foreign exchange through the normal government allocation process, it turned to ZASA, which provided local currency that the CMB was able to exchange through MIC for the needed foreign exchange, purchasing it with an equivalent amount of Zimbabwe dollars. Though CMB's foreign exchange requirements are low compared to its generation of foreign exchange through exports (between 2.5 and 5 percent of export earnings), fulfilling these requirements is crucial to CMB's ability to process and export cotton. Cotton producers have additional foreign exchange requirements for fertilizer (50% of whose cost is foreign exchange) and pesticides (75% foreign exchange), some of which have been imported with ZASA CIP funds. A similar situation occurs with the GMB and coffee producers, both of which have foreign exchange requirements; the board and producers apparently will share the 5% foreign exchange retention that they are to be allowed by the GOZ.

With regard to the efficiency of financial expenditure and reimbursement, however, marketing and input supply activities faced some difficulties. By June 1990 only 68% of their allocations were recorded by MFEPD as expended. While projects may have been

completed using credits, accounting and reimbursements were generally delayed significantly.

### Dairy Marketing Board

Milk is highly perishable, and therefore requires good transport. ZASA has alleviated, to a great extent, the constraints on the transportation of milk, which has been very valuable. The DMB would have preferred to get more ZASA funding, but obviously other sectors also needed funds. Transportation provided with ZASA allocations has been extremely important for moving milk from the farms to the plant and to the urban and rural areas where it is consumed. Because of unavoidable delays between the approval and the actual acquisition of the first lot of vehicles in 1987, a shortfall of Z\$300,000 developed; the Working Group approved this additional financing in the same meeting at which the request was made. Such flexibility is important to institutions like the DMB which have depended on ZASA for part of their funding.

### Effectiveness

#### Grain Marketing Board

There can be no doubt that the enormous increase in maize being grown by small farmers would not have taken place without the Grain Marketing Board having field depots and collection facilities closer to or even within the communal areas. Ten seasonal depots, ten rural depots, three bag depots, and additional storage space at three depots were built with ZASA funding and coffee processing equipment was acquired for 3 other depots. CIP funds paid for three fork-lift trucks used at two of the larger depots. The first of the depots was finished in the 1985/86 crop year and several more were finished the following year.

In almost all cases, the volume of marketed grain appears to have justified the establishment of these depots. The Bazely Bridge Depot began operations in the 1986/87 season and handled 362 MT of maize that year; by the 1989/90 crop year, the volume of marketed maize handled by the depot had risen to over 4000 MT. At another seasonal depot beginning operations the same year, deliveries of sunflowers rose from 4 MT the first year to 2500 MT by 1989/90. Similar large increases have been observed at nearly all of the depots established to serve communal areas. Some of these increases can be explained simply because farmers already producing crops for market were taking advantage of a new, closer depot. For the most part, however, the GMB is convinced that increases represent new production. Farmers are either planting new crops or planning to produce and sell surpluses of crops that they had already been growing for on-farm consumption.

This conclusion is borne out by national statistics. Commercial farmers' production of maize fell from over 1100 MT in 1985 and 1986 to under 650 MT in 1988 in response to dissatisfaction with maize prices; yet production on communal and resettlement farms rose by enough nearly to offset lower production on commercial farms. Expansion of market facilities was a contributing factor to this increase in communal production. (Tables E.4.3 & 4)

**Table E.4.3**

**Large-Scale Commercial Farm  
Production, 1979-1989**  
(in thousands of metric tons)

Year	Maize	Soya-beans	Wheat	Sorghum	Flue-cure Tobacco	Ground-nuts	Sun-flowers	Sugar	Coffee	Tea
1979	706	84	153	19	112	8	1.3	n.a.	4.6	9.8
1980	887	89	155	16	117	11	8.5	250	n.a.	9.7
1981	1713	66	183	24	123	10	12.7	360	n.a.	9.9
1982	1121	89	192	17	67	9	9	360	4.9	10.6
1983	576	79	111	7	89	6	3.3	340	6.9	10.6
1984	666	91	84	17	94	5	8.4	346	9.7	11.8
1985	1180	86	174	51	120	4	18.3	448	10.6	14.1
1986	1133	80	231	65	106	3	18.4	n.a.	11.1	15.8
1987	477	94	190	14	114	11	26	330	13.1	15.1
1988	641	117	214	11	128	12	64.7	319	11.4	16.6
1989	717	121	247	15	120	11	60.6		9.3	

**Table E.4.4**

**Crop Output of Principal Crops Grown on  
Communal Land: 1979-1986**  
In thousand of Metric Tons

Years	Maize	Munga	Rapoko	Sorghum	Ground-nuts*	Soy-beans	Sun-flowers	Cotton	Total**
1979	420	88	58	30	100			15	722
1980	700	100	61	60	100				1088
1981	1000	135	61	100	100	6.75	11	45	1459
1982	595	69	38	50	95	0.3	7.5	27	882
1983	285			44	23	0.2	2.4	26	535
1984	353			38	19	1	6.4	70	641
1985	1558	120	72	76	61	1.7	15	111	2015
1986	1200	78	48	59	48	1	14	98	1546
Total**	6111	788	450	457	546	145	75	448	8888
Average	764	98	56	57	68	18	93	56	1111
Change 1979/86	185%	-11%	-17%	97%	-52%	-85%	27%	553%	114

\* Unshelled

\*\*Totals calculated by using average production where data is missing

Source: Agricultural Marketing Authority: Grain, Cotton, & Oilseed Situation Outlook Reports; AMA Economic Review of Agricultural Industry, 1985-88; Tobacco Marketing Board, 1989 Annual Report & Accounts; Business Herald, March 22, 1990

ZASA has been extremely important in GMB's extension of its services to communal areas. According to figures provided by GMB to the evaluation team, the Board's PSIP budget between 1985/86 and 1990/91 amounted to a total of Z\$30 million. ZASA allocations amounted to Z\$13.2 million, or nearly 44% of the PSIP budget. Without ZASA's contribution, GMB would not have been able to extend its services into communal areas as it has.

The GMB, like other parastatals, is now required to move toward greater market-orientation and efficiency after a long period during which its social function of assisting the communal sector enter into commercial production took precedence over its operation as a financially viable enterprise. GMB has not carried out depot-by-depot

financial analyses of its operations. Nevertheless, some depots like Gwanda, which were built in maize deficit areas, are clearly unprofitable and ex post never should have been built. Many other depots merely provide local communal farmers with an outlet for their production, rather than producing any profit for the Board. GMB would like to sell or transfer a number of depots, but has found little interest among farmers themselves or among agricultural marketing societies in purchasing them. It should be noted that many of the 400 depots built with non-ZASA USAID funding are also idle or abandoned.

A major question is whether or not GMB can operate profitably (or at least without incurring losses as it did until 1975/76) without greater control over pricing. GMB faces serious problems in that it is obliged to purchase certain minor crops such as pearl millet and red sorghum for which it has no buyers willing to pay the prices GMB is required to pay to farmers, thus requiring major government subsidies. Corollary issues involve pan-territorial and pan-seasonal pricing. The GMB is also forced to maintain a carry-over stock of 700,000 MT of maize rather than a more appropriate 400,000 MT. This imposes financial costs on the GMB which contribute to its deficit. GOZ subsidies to the marketing boards, including the GMB, have reached 58% of the total budget of the Ministry of Agriculture, reducing funds available for productive investments.

### Cotton Marketing Board

CMB's new depots, an important number of which were funded by ZASA, decrease transport costs for growers and in some cases mean the difference between growing and not growing cotton. At present, for producers in areas where cotton can be grown, the price ratio favors cotton over maize. The existence of the new depots have in large measure been responsible for the growth in cotton production, particularly in the communal areas where the new depots have been located. (Table E.4.4) Since 1984/85, when CMB received its first assistance from ZASA, cotton production has gradually increased, reaching 323 MT in 1987/88. By 1985/86 production in the communal farm sector (including resettlement farms and ADA) exceeded that of the large-scale commercial sector for the first time; the communal sector has retained its predominant position in cotton production since then.

In the last two years the commercial farmers have switched from cotton and maize to horticulture, tobacco, and non-controlled crops in general, including soya. Farmers abandoning cotton, usually do so for strictly economic reasons; in some areas, however, there is no alternative to cotton due to agro-ecological conditions and rainfall. Prices are established administratively and have been set well below international prices and even below the costs of production faced by some farmers. Were it not for production in the communal areas, cotton output would have fallen even more than it has. Between 1988/89 and 1989/90 production on communal farms (including resettlement and ADA) fell by only about 15% while the production of commercial farmers, who are more responsive to price changes and have more alternatives open to them, fell by 30%.

**Table E.4.5****Cotton Production by Sector:  
1983-1990, in metric tons**

Years	1982/83	1983/84	1984/85	1985/86	1986/87	1987/88	1988/89
Large Scale Commercial	107816	138753	147060	111512	114891	129099	100403
Small Scale Commercial	2410	7767	10015	5068	6864	10028	6702
Communal Resettlement ADA etc.	58233	103748	138398	131577	118359	184155	155314
<b>NATIONAL</b>	<b>168459</b>	<b>250268</b>	<b>295473</b>	<b>248157</b>	<b>240114</b>	<b>323282</b>	<b>262419</b>

Source: Annual Reports, 1985-1990, Cotton Marketing Board

In addition to increasing farm incomes directly, cotton is quite intensive in its use of labor (40 man/days per hectare) and ZASA investments have generated additional employment in transport, bulking and processing. For example, the Mahuwe depot has a salaried staff of 3 and 12 permanent wage workers in addition to a large seasonal labor force hired during the cotton intake season.

#### Dairy Marketing Board (DMB)

Milk intake by the DMB has risen since the ZASA-funded trucks began operating, rising from 237 million liters in 1987 to 256 million liters in 1990. The mileage covered in milk distribution rose from 6.8 million kilometers/yr in 1986/87 to 9.4 million kilometers/yr in 1989/90; this would not have been possible without the trucks purchased with ZASA funds. The operating costs have gone down, from \$2.30 per km for the old fleet to \$0.80/km for the new fleet. The savings in operating costs per year is Z\$461,000. The transport section of the DMB is now operating as a profit center and enjoys decentralized decision making. Transport costs are being incorporated into the price of milk, which is a move toward improved efficiency of the DMB's operation, at a time when all parastatals are being called upon to increase their efficiency.

The additional market outlets in the communal areas have enabled the DMB to sell more milk and milk products and raise the volume of milk it is willing to accept while improving nutrition in communal areas. Farmers, both commercial and communal, have responded by producing more milk for sale to the DMB.

Milk production has grown 7% annually, from 140M liters at Independence to 256M by 1990. By 1986 the country had become self-sufficient in milk. At Independence, there were virtually no small producers. Now there are 500-700 producers and 530 large commercial farmers including 30 blacks; commercial producers are the mainstay of the industry. There is a worldwide trend toward concentration in the dairy industry because of economies of scale.

Although 95% of milk still is produced by the large-scale commercial farms, there is a small scale commercial sector collection center just south of Harare (Marirangwe) and a communal sector initiative at Chikwaka 50 kms. north east of the city. Much of the rural milk production is sold right in the areas where it is produced; thus, there are many small producers whose milk does not pass through the DMB

channels and is therefore not recorded. Milk is a good product for small farmers because production is nearly constant throughout the year (only a 25% summer-winter differential). When small producers sell their milk locally, they obtain immediate payment; the DMB gives milk-checks to their producers each month. In either case, dairy production provides a year-round source of income.

Domestic demand has not been growing very fast; what growth there has been is based mostly on expansion of deliveries into rural areas and population growth, since per capita incomes have not been growing in recent years. The DMB now produces longer-life products: cheese, ultra-high temperature (UHT) milk for the rural areas and for export to neighboring countries, powdered milk and butter. Growth is concentrated in UHT milk, since there is no tradition of using powdered milk, butter, etc.

Currently about 10% of national production is exported; there is considerable potential for growth in the export market, although it has been somewhat curtailed by outbreaks of foot and mouth disease. DMB is capable of competing in the export market with the South Africans whose milk is more expensive. Exports now account for most of the industry's growth and are currently running at Z\$10M, with a potential for growing to Z\$20 by 1992. The DMB is exporting milk to Malawi, Botswana, Burundi, Zambia, and to the Indian Ocean islands; it also exports to South Africa, which has the biggest growth potential. Better transport financed by ZASA has been the key to many of these increases.

### General

Without the expansion of the computer system at AMA, it would not have been possible for the marketing boards to manage the accounting associated with their expansion of services to a large number of communal farmers. As it was noted in the previous chapter, a large part of the work and delays in processing payments is due to a system of stop-orders through which farmers receive no payments whatsoever for products marketed through the marketing boards until deductions have been made to pay off loans from the AFC.

## Conclusions

### Grain Marketing Board

- ZASA has been an important contributor to GMB's expansion into communal areas; providing 13% of all government funds to GMB and 28% of donor funds
- The 20 new depots funded directly by ZASA have helped bring about major increases in grain production, particularly maize, that have taken place in communal areas.

Maize production in communal areas, which has been important in raising farm incomes, has become increasingly important as commercial farmers have switched to other crops. The organization representing small farmers opposes retrenchments by GMB and the transfer from GMB's monopoly to a free market. Thus, it will be difficult for GMB to pull out of areas it has opened up to commercial grain production.

## Cotton Marketing Board (CMB)

- ZASA funded 2 of 11 new depots built by CMB plus cotton handling equipment that, together with training funds to the Cotton Training Center, have together made an important contribution to increased communal area cotton production.

Communal areas have experienced major increases in production with concomitant increases in income and employment for communal area farmers both from their own production and from seasonal employment on commercial farms. Additional employment is also generated in transport activities and in bulking, ginning and other processing activities carried out by the CMB. Communal farmers can make profits in cotton production even at the relatively low prices of the last few years. The CMB is attempting to achieve a greater role in setting producer prices, in exporting a higher percentage of the crop, and in seeing subsidies to local spinners reduced and eventually eliminated. The CMB is also trying to solve transportation problems both from farms to depots and in rail transport to Maputo and Beira.

## Dairy Marketing Board

- ZASA funding has substantially increased DMB's motor vehicle pool, leading to increased purchases of milk from farmers and improved rural milk distribution.

While most production is still in the hands of large-scale commercial farmers, some small-scale and communal farmers have been able to market their milk through the DMB. This is likely to increase among small farmers living near DMB collection centers. The nutritional level of rural people is also likely to improve with the increased availability of non-perishable milk products in rural areas. The extension of electrification makes possible the distribution of perishable milk products to suburban and some rural areas.

## General

In summary, ZASA, in terms of both its local currency grants and public sector CIP allocations to CMB and AMA, has been important, and in some cases crucial, to the outreach capacity of the marketing boards and to their ability to provide services to the communal sector. Providing 13% of total GOZ funding for GMB and 28% of all donor support, for example, the ZASA program has allowed communal farmers to grow new crops for which marketing boards had opened up a near-by outlet and to expand production of crops grown in the past largely for on-farm consumption. These changes have led to increased production of the export and food crops purchased by the marketing boards. A disproportionate share of the benefits of many of these investments has gone to the large-scale commercial sector, as in the cases of coffee and dairy products. This seems, however, to be inevitable in crops which have been dominated historically by the commercial sector. Nevertheless, the communal and resettlement sectors have benefitted from all ZASA investments made to improve marketing.

## **Recommendations and Lessons Learned**

### **Grain Marketing Board**

- 1. ZASA should now provide aid to the GMB to divest itself of market collection points and depots which it cannot run profitably.**

Having provided the GMB with substantial assistance in expanding its network of service into the communal areas, ZASA should not oppose the closing of totally unprofitable depots such as Gwanda. Some depots and collection points might be run profitably by farmer-owned cooperatives.

- In line with past financing of engineering studies by GMB's staff engineers, ZASA might finance a GMB staff study, or a study by GMB in conjunction with outside financial experts and economists, of its depot and collection point network.**
  - If this study identifies depots or collection points that should be closed, ZASA should not object to such closures. If depots can be identified which could be profitably operated by cooperative societies, ZASA might provide financing through the AFC. If there is no interest or capability on the part of cooperatives, ZASA might consider funding to the AFC for on-lending to private parties willing to operate depots as private businesses.**
- 2. Within the context of existing dialogue with the GOZ, USAID should include a discussion of the problems faced by the GMB which may impede its ability to move toward profitable operation.**

The principal problems needing to be addressed are levels of maize stocks which need to be maintained, pan-territorial and pan-seasonal pricing, GMB's role in setting prices for and making decisions about what crops should be maintained within the purview of the GMB and which can be traded freely. The GOZ or SADCC countries, or both, should compensate GMB for the policy decision that maintain grain reserves higher than those needed for a normal carry-over stock for commercial operations.

### **Cotton Marketing Board**

- 3. With remaining local currency resources, ZASA should complete the financing required for replacement of the Kadoma ginnery for which initial approval has been granted.**

This will exhaust a large part of local currency funds still to be generated when authorized CIP commodities are shipped.

- 4. Any future program similar to ZASA should give the CMB a fair hearing on its need both for foreign exchange and local currency.**

Support might be in the form of financing, either with local currency or more probably through CIP funding to allow private individuals living in cotton-producing areas to buy trucks whose principal use would be hauling inputs to farmers and transporting cotton to CMB depots.

- 5. The policy issues affecting CMB form part of a more general set of problems which need to be addressed by economic liberalization and structural adjustment and should be included in any policy dialogue between USAID and the GOZ.**

## Dairy Marketing Board

6. No additional allocations should be given to the DMB from remaining ZASA funds; the DMB has already benefitted substantially from ZASA funding and has made effective use of these resources; other sectors need the very limited resources which remain.
7. In future programs such as ZASA, funding might be focused as much as possible on bringing the opportunity to produce milk to small farmers.

Since milk production, besides improving family nutrition and providing a basic income throughout the year, complements other activities and makes good use of crop residues, it can also encourage communities in which there are a significant number of producers to develop range management mechanisms which protect the pasture needed by dairy herds.

8. Policy dialogue between USAID and the GOZ related to the dairy industry should include the issue of foreign exchange requirements.

The dairy industry produces foreign exchange yet it has intensive capital requirements in both local and foreign currency which must be met if it is to grow and achieve its full export potential. Until economic adjustment measures eliminate foreign exchange shortages, an interim solution might be to allow DMB to retain a substantial part of its foreign exchange earnings, part of which should be shared with dairy producers to meet their own needs.

9. DMB should be allowed to participate in future CIP programs to satisfy its foreign exchange requirements, perhaps by retaining a percentage of export earnings.

## General

10. ZASA funds should be made available to facilitate critical decisions that must be made by GOZ concerning which crops to control and which to decontrol.

This is an issue that should be analyzed by local and/or international consultants. For crops which remain controlled, focus should be on the liberalization of marketing, such as the freedom to trade in maize within communal areas. For controlled crops, price policies to encourage desirable levels of production would be appropriate for study. These matters could be funded with local currency resources still available under the current project and it would certainly be appropriate to include these when considering follow-on projects or similar projects in support of marketing and input supply.

11. Future programs focusing on marketing should target communal farmers.

Despite considerable focus on smallholders, much of the benefit since Independence has nevertheless gone to the large-scale commercial sector. Now that basic infrastructure investments have been made, reorientation to communal areas should be easier to achieve.

## Chapter 5

## Land and Water Use

## Irrigation and Range Management

**Concept and Objectives**

Zimbabwe has great variations in rainfall, frequently faces drought, and has large semi-arid communal areas that have high populations of people, livestock, and wildlife. Land distribution is highly skewed, resulting in the majority of the population either being landless or having very small holdings in communal areas. ZASA activities sought to reduce vulnerability to drought, particularly for smallholders, improve land and water management for sustainable agriculture and wildlife utilization, and support selected resettlement initiatives. Efforts were to be funded to expand the area under irrigation, especially within communal areas, where irrigation was minimal.<sup>30</sup>

**Findings****Background and Context**

For decades Zimbabwe has faced a land and water shortage that has, from time to time, caused political unrest. The natural resource base cannot sustain the populations of both humans and animals that depend upon it. The majority of the country's most productive land (29% of total land) is concentrated in limited areas of relatively high rainfall (Natural Regions 1 and 2) and is controlled by the commercial agricultural sub-sector; this is dominated by fewer than 5,000 white families. These farms provide employment for 225,000 workers, however, and produce two-thirds of the nation's gross agricultural output, four-fifths of crop sales, nine-tenths of all marketed livestock, and 40% of all export earnings.<sup>31</sup>

By contrast approximately 1,000,000 families, with over 70% of the country's black population, live in communal areas, which constitute 42% of the nation's total land. These areas tend to be overpopulated in terms of both people and livestock, and have been so since at least the 1940s. In these areas soil quality is generally poor and rainfall relatively low and unpredictable. (Natural Regions 3, 4, and 5) Since Independence 5 in 10 years have been classified as drought years, with one of these classified as a hundred year drought. Many families in communal areas do not cultivate crops for lack of draft animals and must rely on off-farm employment to make up recurring financial shortfalls as real incomes continue to drop. There is no land market in communal areas, nor are commercial lands available for purchase by smallholders because government restrictions permit the sale only of entire estates.

<sup>30</sup> Direct support of National Parks field staff through funding of housing and improved communications is discussed in Chapter 2, "Agricultural Extension."

<sup>31</sup> World Bank, Discussion Paper: World Bank Agricultural Sector Memorandum, "Policy Options for Zimbabwe;" Harare, Oct. 26, 1990:3

At Independence Zimbabwe had about 143,000 ha. of land under irrigation, 80% of it in the commercial sector. Surface water to irrigate an additional 400,000 ha., as well as undetermined amounts of groundwater, are potentially available for irrigation. Despite this, the lack of research, extension, information, equipment, and finances has limited expansion, while communal land tenure has inhibited the growth of complementary credit support available to smallholders.<sup>32</sup>

The country thus faces a relatively high risk of resource degradation and a drop in sustainable agricultural production in many communal areas. Some areas face the prospect of desertification if current trends are not reversed. Irrigation can provide only a partial solution to this problem in limited areas where it is feasible; it is, however, extremely effective in increasing production dramatically and in raising farm incomes.

## Procedures

### **Changes in Land and Water Management since Independence: Resettlement, Wildlife Management, Conservation Education, and Irrigation**

To address land and water constraints, and to bring more equity to the country's socio-economic structure, major land, conservation, and irrigation development programs have been initiated since 1980. Irrigation systems ruined in the war have also been rehabilitated in some areas. Large-scale resettlement programs, wildlife management areas, conservation education, and expansion of irrigated lands in rural areas, have all been allocated ZASA funding.

### **Resettlement: Crop and Livestock Management**

Unequal land distribution is one of the most important issues in the nation's economy. A major resettlement program has been a keystone of government policy since Independence. It is aimed at making land more readily available to those who otherwise would have little or no access to it and at altering settlement patterns in selected communal areas. At Independence the Lancaster House agreements established the principle that land transfer from commercial farmers to the government for resettlement purposes would be on the basis of "willing buyer--willing seller." From 1980 to 1983 the majority of the land purchased was farm land abandoned during the war by retreating white settlers, which was available at low prices. Since 1984 land values, prices, and productivity have risen steadily, making further land purchases for resettlement expensive, with high opportunity cost since land which might be purchased was already in profitable crop production and/or livestock activities.<sup>33</sup> The initial target was to settle 162,000 families by 1985. By the end of 1987, however, only 46,300 families had been resettled on 2.6 million ha. This resettlement represents 7% of Zimbabwe's agricultural land and 6% of its rural population.<sup>34</sup>

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<sup>32</sup> USAID, Zimbabwe Agricultural Assistance, PD, Sept. 23, 1982:19.

<sup>33</sup> Commercial farmers have been redirecting production toward high value crops, primarily export crops (tobacco, horticulture, beef), import substitution (wheat), or specialist crops (dairy).

<sup>34</sup> M. Rukuni, "The Development of Zimbabwe's Agriculture: 1890-1990;" Univ. of Zimbabwe, Dept. of Ag. Econ. & Extension, September 1990: 44; and Hwekwete, "A Review of the Rural Land Resettlement Programme in Post-Independence Zimbabwe;" forthcoming.

**Table E.5.1**

**Land & Water Use:  
Resettlement Models**

<b>Model</b>	<b>Organization/Description</b>	<b>Zone/Area</b>	<b>Production</b>
A	Family model; traditional land tenure; pvt. crop lands & residences; communal grazing	Med. to high rainfall; mostly natural grazing on commons	5 ha. arable; 48 ha. grazing/household; traditional management systems
B	Cooperatives; collective management; State ownership of land; collective ownership of implements	Med. to high rainfall; former commercial farms (mostly poor condition; abandoned)	Collective production of crops formerly produced on commercial farms; private cattle ownership
C	Combined central coop. & pvt. farms; outgrower schemes; both collective & individual holdings	Med. to high rainfall; linked to processing facilities	Focused on crops like sugar that are amenable to outgrower production
D	Resettlement largely in same or adjacent communal area; access to adjacent grazing	Semi-arid areas; low rainfall; traditional grazing conditions	Traditional and new crops; improved grazing & wildlife management

Sources: Discussion Paper, World Bank Agricultural Sector Memorandum; Policy Options for Zimbabwe, IBRD, 10/26/90; M. Rukuni, The Development of Zimbabwe's Agriculture: 1890-1990, Univ. of Zimbabwe, 9/90; EEC, ODI, Eurostat Report Zimbabwe, 1990; field visits Oct.-Dec. 1990.

Model A schemes follow traditional communal lines except that land holdings are larger than average. For example, families have 5 ha. of crop land and access to almost 50 ha. of grazing land, rather than the communal area average of less than 2 ha. for crops and 20 ha. for grazing. This model is reported to be quite successful. Land is not available for any significant expansion of Model A schemes.

Model B resettlement involves a group of farmers operating a former commercial farm as a collective. By 1990 104 farms had been purchased for this purpose. Of these, 97 are now registered collectives, of which 93 are State owned. Of a target of 6000 families for Model B, 3000 had been resettled by 1990. Land utilization on these collectives ranges from 14% to 33%, labor utilization ranges from 7% to 41%, and yields seldom exceed one ton/ha., all low figures compared to either family or commercial operations. Most of these farms were abandoned during the liberation war and were often run-down, with facilities damaged or destroyed. Plagued by lack of finance, inputs, management skills, and appropriate incentives, these farms have had high membership turnover and most are financially bankrupt.<sup>35</sup> It has been suggested that some of these farms might effectively be converted to Model A or C development.

Model C is a combination of centralized cooperative farms and private farms. It often includes an outgrower program built around individual holdings linked to a central processing facility or collective farm. It is often associated with the sugar industry, has generally involved providing families with modest holdings, often from or near former estates and located near existing processing facilities. Smallholders are responsible for all their own operations, obtaining input, credit, and technical support from the processing facility which purchases all output.

Model D has been partially funded by ZASA and includes, as an example, two separate ranches about 30 kms. apart which have been opened to controlled grazing by

<sup>35</sup> Rukuni, op. cit.: 44

neighboring communal area smallholders. It has the advantage of not requiring the physical relocation of families. In this model significant numbers of communal livestock move onto the equivalent of a commercial ranch established adjacent to the communal area. Fees are charged for each head of cattle; this has begun to alter pastoralist perceptions of the range as a free resource. Model D is supposed to take the pressure off the communal range and let it rehabilitate naturally while animals are on the ranches. Animals are then to be put back, up to pre-determined limits. The villages are expected, in the meantime, to reduce overstocking and to resolve their overgrazing problems during the respite provided while livestock are grazed on the Model D ranches. In the final analysis, government has attempted to buy village grazing reform with its resettlement dollar.

In the past model D has faced several problems. Civil disturbance in Matebeleland, where model D has operated, led to interference with the scheme soon after its start. Other ranches purchased for these schemes were left in State custody, but have been pillaged and overgrazed, largely because of delays in implementation.

Today, only one of the two farms on which model D was implemented with ZASA support is fully developed; the other is only partially developed, lacking fencing and boreholes. Government took complete responsibility for project infrastructure. Community participation, except for labor paid for by the scheme, was neglected. Promised services, including water supplies for the second farm are still missing; fencing is incomplete in some areas, down in others, and the resources are not available for their completion or repair. Both farms, while in better condition than those in most communal areas in similar settings, are still overstocked and could face serious problems if the area experiences another year of drought. Farmers have not been asked to make any significant contribution to infrastructure development on the farms and thus have only limited commitment to their long-term development. Only one group of surrounding communities has benefitted from the program. Furthermore, the concept of community-based range management has not yet been internalized by local farmers.

Nevertheless, with ZASA assistance the community is now engaged in a learning process concerning communal area land use planning and management. Farmers have begun to decrease the number of animals grazing on communal land while keeping a somewhat higher calibre of animal for fattening on Model D than was previously on the commons. The result has been fewer, but healthier, animals. Calving rates are reported by ADA to have risen from 54% to 74%. These changes are reflected in selling prices which have risen from a pre-project level averaging Z\$200 to new highs that reach as much as Z\$1000. Although cattle are still held as a form of savings, and offtake remains at a very low level (approximately 2%), farmers are beginning to recognize that price changes make it possible for them to think of cattle management as a means of putting their children through school, improving their homes, or purchasing implements, inputs, and even tractors or vehicles.

Wildlife management within the Model D resettlement ranches is closely related to the program organized for cattle. The focus is on generating wildlife products for which there is very high demand, and thus a real cash payback to the community. Wildlife utilization is in many ways a profitable substitute for cattle production, and it involves fewer out-of-pocket expenditures and risk of losses. As observed on neighboring commercial game farms, if properly managed, wildlife can produce an even higher return than cattle. The wildlife activities of Model D were placed under the control of the local village council, with advisory service from ADA, the Dept. of Natural Resources, and other government departments, and funding partially from ZASA. The wildlife area of one of the farms was managed for a while by the Dept. of National Parks, but now is under the direct jurisdiction of the project. ADA is now looking for a joint venture partner with experience in wildlife management so that staff and local people can learn how to manage the wildlife resource profitably.

On one of the Model D ranches a significant undeveloped area has been set aside specifically for wildlife management, as have large portions of adjoining commercial ranches. Trophy hunters are currently paying from Z\$30-75 for a gazelle and up to Z\$800 for kudu. The ADA project coordinator is seeking a joint venture partner among local tour operators so that local ranch managers can learn how to run profitable wildlife utilization operations on their own. Like cattle production, wildlife management receives nominal state support, but has proved itself superior to cattle in drought prone regions, both financially and in terms of environmental sustainability. Wildlife survive in areas where cattle die of thirst and hunger, despite excessive populations and consequent overgrazing.

Community-level wildlife management on Model D ranches, and throughout Zimbabwe, appears to have received a setback from the international ivory trading ban. This ban has restricted the managed culling of elephant herds by communities, one of the most profitable wildlife management exercises available to them.<sup>37</sup> The elephant population in Zimbabwe has grown so rapidly in recent years that in 1990 an estimated 20,000 animals needed to be culled to avoid degradation of the land resource and to reduce the likelihood of starvation within the elephant population. At least 4,000 animals have to be culled during 1991 yet wildlife management cannot be funded with the proceeds of this culling because of the worldwide ban on ivory sales.<sup>38</sup> Despite this setback to the promotion of community-level wildlife utilization activities, ZASA investments have made an important impact in helping ADA and Model D managers focus on wildlife as a resource.

### Natural Resource Conservation Information and Education

In 1988 an extensive program to spread natural resource management information and education was initiated by the Department of Natural Resources (DNR) using Mobile Environmental Education Units (MEEU) funded by ZASA. During the past

<sup>36</sup> Direct ZASA assistance to wildlife protection and management programs is discussed in Chapter 2, "Agriculture Extension." Here attention will be directed to those aspects of wildlife management related to land and resettlement, particularly as applied to Model D.

<sup>37</sup> The ban may also have increased incentives for poaching by outsiders, largely Zambians; Zimbabwe Herald, Harare, Nov. 3, 1990: 5; Nov. 10, 1990: 1.

<sup>38</sup> Ibid

2 years almost 900 workshops, conferences, field days, shows and other demonstrations have been conducted in all 8 provinces, attended by about 300,000 people. The following table summarizes achievements of this ZASA-funded program. (Table E.5.2)

**Table E.5.2**

**Environmental Education Program  
Ministry of Environment & Tourism**

<b>Year</b>	<b>No. of Shows</b>		<b>Attendance</b>
1988	269		127,168
1989	603		170,382
<b>Total</b>	<b>Shows/Meetings</b>	<b>872</b>	<b>Attendance</b> <b>297,550</b>

Source: MET; Dept. of Natural Resources, Nov. 7, 1990

These extension education programs--focusing on soil, water, forest, and wildlife conservation--were aimed at bringing environmental awareness to rural farmers and communities and encouraging local people to initiate practical programs to help reverse the environmental degradation taking place. As a result, communities have initiated a wide variety of projects including land rehabilitation, stream bank protection, and gully reclamation. They have become involved in the development of village gardens, exotic woodlots, and protection of indigenous timber for fuel wood purposes. Six comprehensive pilot projects in natural resource management, which show considerable potential, have been developed for donor funding. More important, these programs have developed a consciousness of and a receptiveness to natural resource issues which makes communities future participation in conservation projects likely.

### Irrigation

Despite increased attention to smallholder irrigation since Independence, the majority (80%) of Zimbabwe's approximately 192,000 ha. of irrigated land is on commercial farms. Schemes include canal, pump, sprinkler, and drip systems. Irrigation for the smallholder, while still limited, reaches back to the 1920s. Then, under the auspices of a number of missionaries, small communal area schemes were started in several parts of the country. After 1970, under both government and non-government programs, irrigated hectareage on communal lands doubled to a total, at Independence, of approximately 5000 ha. or about 5% of all irrigated land. By 1983 this area had risen to 5800 ha. and by 1991, with assistance from ZASA, was projected to double to approximately 11,000 ha. serving 7,000 farming families.<sup>39</sup> There is still considerable irrigation potential to be realized. For instance, in one province, the Midlands, officials claim that 60% of the irrigation potential is not utilized, much of it in communal areas.

Smallholders in irrigated communal areas are given tenancy rights to a piece of land that generally averages just under one hectare. The title remains with the government and eligibility requirements must be met and retained if families are to stay in a scheme. Incomes from this land range from Z\$1500 to Z\$6000 per family, from which Z\$145/ha. is charged by Government for system maintenance and repair. AGRITEX provides overall project management and supervision and controls subsidiary

<sup>39</sup> The balance includes government estates (12%) and resettlement farms (3%); Ministry of Community and Co-operative Development, Community and Co-operative Sector Overviews: July 1990: 1-6.

irrigation channels. The Ministry of Energy and Water Affairs controls the dams, pumps and main channels.

Smallholder irrigation remains beset by financial, maintenance and performance problems, which ZASA's involvement in developing new capacity ignored. The scheme assigns plots of varying size to smallholders at the time of settlement. These are assigned relatively arbitrarily without regard to the farmer's management capacity or labor resources. There is no provision for leasing, buying, or selling land or water rights. Schemes are heavily administered by government rather than being user-owned or user-financed. At Nyanyadze the farmers' committee has asked that it be allowed to take over responsibility for running the scheme, a position supported by local officials and which today is finding sympathy in government.

ZASA contributed a total of Z\$4 million to two major irrigation funds: the Irrigation Support Fund (ISF) and the National Farm Irrigation Fund (NFIF). In 1988 the Irrigation Support Fund began disbursements from its Z\$19.8 million pool specifically to finance, for small-scale irrigation schemes in communal and resettlement areas, the development of water storage facilities and conveyance works up to the edge of the farmer's field. GOZ has targeted 3000 ha. in communal areas for irrigation under this fund.<sup>40</sup>

The National Farm Irrigation Fund, established in 1985 and administered by the AFC, has a revolving fund of Z\$16 million. This fund's major purpose is to encourage winter wheat production, particularly on large-scale commercial farms, although small farmers functioning in groups have received Z\$260,000 in loans since 1986. Small-scale commercial farmers have received an additional Z\$120,000 during the same period. As a result of this program the total area growing irrigated wheat has increased by 7000 ha., contributing substantially to the national rise in production from an average of 179,000 tons for the years 1979/81 to approximately 300,000 tons for 1990. This meets more than 90% of the nation's demand for wheat.<sup>41</sup>

In addition to contributing to these two special funds, ZASA provides funds through AGRITEX to support smallholder irrigation programs in specific communal areas, including Nyanyadzi, Nenhowe, and Tawona. These projects reportedly will irrigate 221 ha. at a total cost of Z\$7.6 million, of which the ZASA contribution is Z\$2.8 million.<sup>42</sup>

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<sup>40</sup> The Irrigation Support Fund is considered to be a GOZ-funded program. ZASA Working Group minutes refer to ZASA contributions of Z\$5 million to NFIF. However, USAID and MFEPA accounts refer to ZASA contributions of Z\$4 million to ISF plus an additional Z\$2.84 million to specific smallholder schemes in Nenhowe, Nyanyadze, and Tawona. Which projects are being funded is not clear from existing records.

<sup>41</sup> Ibid.

<sup>42</sup> FAO irrigation report, annex 4.15. Note: Documentation is contradictory regarding the acreage of the Nyanyadze scheme. Published reports list it as 150 ha. costing Z\$7.2 million, or Z\$48,000/ha. (ZASA contribution: Z\$2.2 million.) Field staff at Nyanyadze reported targets of 100 ha. of new land for irrigation plus 300 ha. for rehabilitation, costing an average of Z\$10,000 and Z\$7,000 per ha., respectively (suggesting a total cost of Z\$3.1 million). This compares to an average of Z\$8,700/ ha. for all donor funded irrigation projects.

## Performance

### ZASA's Role in Supporting Land and Water Use

As Table E.5.3 indicates, ZASA has played a part in all of these programs, investing in resettlement, conservation, and irrigation. It has provided a total of Z\$10.6 million, plus almost US\$1 million for technical assistance and imports, which constitutes approximately one-quarter of all ZASA allocations.

**Table E.5.3**

**Land and Water Use:  
Allocations & Expenditure**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Soil Survey Equip.	DR&SS	87/90		53,000	n/a
Irrigation Support Fund	AGRITEX/MLRRD	85	2,000,000		0
Nenhowe/Nyanyadze Irrig.	AGRITEX	85	2,476,000		1,029,398
Tawona Irrigation Scheme	AGRITEX	85	360,000		96,773
Irrigation Support Fund	AGRITEX	na	2,000,000		0
Rutenga Mapping	MLRRD	86	541,132	104,000	401,786
Zainbezi Valley Tillage	MLARR	85	100,000		0
Ranch Scheme (Model D)	ADA	84	500,000		353,957
Forestry Comm'n. Equip.	Forestry Comm.	84	150,000		0
Mgt. of Indigenous Forests	Forestry Comm.	86/90	200,000	101,001	0
Irrigation Dev't. (Farm)	UZ/Agric.	85	205,000		205,000
Natural Resource (Hard)	MET	84/7	275,000	540,670	90,395
Extension Educ. (Soft)	MET	84/90	1,139,800		41,247
& Monitoring (Soft)	MET	86	215,000	134,400	17,860
Wildlife Symposium	MET	87	20,000		0
Open Wells Test	MEWRD	84	100,000		99,212
Underground Water	MEWRD	84	400,000		400,000
Chipenge Water Augment'n	MEWRD	87/90		35,000	n/a
<b>Subtotal Land &amp; Water Use</b>			<b>10,681,932</b>	<b>968,071</b>	<b>2,735,628</b>
<b>Percent of Total</b>			<b>17%</b>	<b>8%</b>	<b>26%</b>
			<b>of tot Z\$ alloc.</b>	<b>of US\$ alloc.</b>	<b>of Z\$ allocated**</b>

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

The Model D resettlement project received Z\$500,000 in ZASA funds through ADA. ADA officials believe that ZASA directly assisted Model D at a critical juncture, providing needed funds expeditiously. Major funding provided by ODA would have been largely lost had ZASA funding not come at the appropriate time.

Natural resource education programs have been assisted with ZASA funds totalling Z\$1.6 million and US\$675,000. These have provided both equipment and materials, including vehicles, motorcycles, generators, and spare parts. Funds have also helped produce posters, books, pamphlets, stickers, films, and videos that have facilitated staff mobility and contributed to audio-visual outreach programs in targeted communities.

Irrigation funding through ZASA totalled approximately Z\$7.5 million including grants for specific schemes at Tawona, Nenhowe, and Nyanyadze. These efforts directly contributed to the development and/or rehabilitation of irrigated land in both commercial and communal areas and to significant increases in national wheat production.

While these irrigation initiatives have made an important contribution to increasing productivity and incomes of participating smallholders, they have done little or nothing to solve the problems affecting existing systems, many of which are not operating at full capacity. At Nyanyadze, for example, only 1 of the 6 irrigation pumps is functioning; the other 5 have been out of service for between 5 and 10 years.

## **Impact**

### **Efficiency**

In each of these four program areas--resettlement, wildlife management, conservation, and irrigation development--ZASA has proved an efficient, but decreasingly important mechanism for addressing the land and water constraints facing the smallholder. The basic problem is one of overlapping responsibility for system operation in the field and of the failure to give users control over maintenance as well as the financial obligation to pay the real cost of the water. The departments concerned with these program areas, irrigation excepted, have generally shown an ability to respond to the demands placed on them with reasonable efficiency. In contrast, Working Group minutes reveal considerable confusion over irrigation program implementation and funding.

With regard to the efficiency of financial expenditure and reimbursement land and water use activities faced difficulties, however. By June 1990 only 26% of their allocations were recorded by MFEPD as expended. While projects may have been completed using credits, reimbursements were generally delayed significantly.

### **Effectiveness**

While Zimbabwe is still a long way from having solved the complex problems of land degradation, water use, wildlife utilization, and range management in communal areas, new and promising management models are being developed and tested, some with ZASA support. A conservation education message has reached large numbers of people and has raised community consciousness concerning conservation problems and a demand for solutions. However, communities can only develop and implement solutions to these problems if they are granted a degree of autonomy, which at present they do not possess. The centralized, top-down political system inherited from the colonial period has yet to be replaced by a system of community control of common resources consistent with stated government policy.

In the realm of irrigation, thousands of acres of new land are being brought under one scheme or another. Bureaucratic procedures, conflicting responsibilities among government departments, and the powerlessness of both local farmers and AGRITEX staff to solve the problems of existing irrigation systems, result in wasted investments as systems perform far below design standards.

## **Conclusions**

While important progress has been made since Independence, major problems still remain in the area of land and water use. While some resettlement schemes are showing promise, it is increasingly recognized that:

- Resettlement is not the panacea that it was thought to be at Independence and it cannot begin to address adequately the underlying problems posed by an unsustainable land to man ratio; of an initial target to resettle 162,000 families by 1985, only 46,300 families had been resettled by 1987, many on poor land.
- Overgrazing continues unabated and current fees, where they exist at all, are too low to provide the incentive to sell excess livestock. Wildlife utilization and management is gaining acceptance as a means of both conserving game species and providing local incomes, yet poaching remains a serious problem.
- Conservation awareness is generally growing among rural people, but the necessary mechanisms for enabling community control and enforcement of conservation decisions are still non-existent.
- Irrigation of new land is increasing slowly, yet inadequate management of existing schemes poses important constraints to sustained production and farmer income.

Despite the effort put into resettlement programs, land distribution remains highly skewed and prospects for altering this significantly are not promising. Furthermore, productivity on resettlement land frequently has not increased, while in many cases it has dropped significantly below levels attained on nearby commercial farms. Given the severe management problems encountered to date, expanded resettlement models and plans are being reconsidered, particularly with the expiration of the Lancaster House agreements in October 1990, which had provided for secure tenure for communal farmers.

In December a new framework was put in place that allowed government to defer payment for commercial farms it wished to purchase, to set land prices, and to pay for it in local currency. This created uncertainty among commercial farmers about the future, and reluctance on their part to make new capital investments. Both the unsatisfactory performance of resettlement efforts and anxiety within the highly productive commercial sector have created a climate that makes careful policy analysis and decision-making essential for the future of both the small and large-scale agricultural sectors.

- ZASA investments in Model D have had an important impact on helping GOZ examine resettlement options, particularly as it grapples with the critical problems of densely settled communal areas, overstocking, and resource degradation.

Nevertheless, an evaluation by MFEPD indicate a series of problems with the way Model D has been implemented. While ZASA funding for Model D is perceived by ADA to have come at a crucial time, other unexplored opportunities to tackle overgrazing and resource depletion should be developed and tested as well. These include both new and revised land management models as well as the potential conversion of failed Model B farms into more promising alternatives.

- As a result of the success of ZASA-funded natural resource information and education programs, demand from settlements for assistance in developing soil, range, and wildlife conservation projects far exceeds the resources available for implementation.

ZASA funding has been, in the view of the Department of Natural Resources, the critical ingredient in its two-year field effort that has produced almost 1000 shows

attended by 300,000 people; this effort has dramatically increased local awareness of conservation problems and instilled a strong desire to solve them. A variety of opportunities for future ZASA and/or other donor funding exist based on community-level initiatives in the field of conservation.

Overall, in the eyes of a number of informed observers, the combination of resettlement initiatives, expanded irrigation, and conservation education has made it possible to imagine the design and implementation of successful communal area irrigation, range, and wildlife management systems in areas hitherto seen as almost unreachable. While these programs have yet to achieve some of their objectives, they provide an important foundation for the further development and testing of alternative models for productive and sustainable land and water use.

### **Recommendations and Lessons Learned**

- Investments in land and water use have been productive. It is therefore recommended that additional funding be made available for new and continued programs in land and water use, including resettlement, irrigation, and range management and wildlife conservation.
- Remaining ZASA funds should be limited to supporting refinement and community control of range management under Model D and to ensuring that existing ZASA-funded irrigation schemes are fully operational under direct management by water users.

With regard to potential future funding, for each of the major investment areas that follow, it is recommended that:

#### **Resettlement and Land Management**

1. Further investment and experimentation be made in the design, testing, and implementation of communal area range, livestock, water, and wildlife management efforts. Programs such as Model D must be closely monitored, their problems identified, and solutions developed in close collaboration with local leadership. This should be done in a manner that places maximum responsibility on the smallholder community.
2. Communities be supported to develop, implement, and control their own conservation, grazing, and wildlife management programs. Appropriate funding from government and donor sources should be made available on a loan or matching grant basis to complement funds raised from the communities themselves through fees or levies.
3. Grazing fees, to be retained by local management committees, be levied on all animals. Current fees, where they exist, are too low and must be raised. Similarly, sales levies deducted through the marketing process should be kept as low as possible and returned to and controlled by communities and communal producers organizations for investment in infrastructure, research, extension, and marketing support.
4. Appropriate water charges be instituted and funds managed by local farmers organized around irrigation channels. The crazy quilt of overlapping government agency authority has to be removed and organized local farmers have to be given responsibility for and control over their irrigation systems.

5. Commercial farmers be permitted to sell portions of their lands to small farmers on a "willing buyer--willing seller" basis in order to provide a viable land market for small holdings.

#### **Wildlife Management**

6. Communities be given authority, responsibility, and necessary incentives for the sustainable management and harvesting of wildlife resources within their traditional grazing and hunting areas. As is happening under the CAMPFIRE program, communities must be enabled and encouraged to place controls and levies on those resources and to generate incomes from them.
7. Collaborative programs involving commercial game ranchers, tour operators, and local communities be encouraged through matching grants, tax incentives, and loans.

#### **Conservation Education**

8. Government and donor funding be made available on a matching grant or loan basis to communities for developing viable conservation programs. New forms of village organization that reveal the real costs of resource degradation and place husbandry ahead of exploitation should be supported. The democratic village company concept piloted elsewhere in Zimbabwe provides one such model; consideration should be give to its replication in each agro-climatic zone.

#### **Irrigation**

9. Smallholders be given secure tenure to their irrigated land along with the right to buy and sell portions of this land.
10. Smallholders be encouraged and assisted to form management organizations, such as water users' associations. These organizations would be allowed to purchase local infrastructure and to assume all control for their maintenance, repair, as well as for water allocations and daily operations. These fees should be based on marginal cost prices for water which cover the cost of operating and maintaining the irrigation system. Because of differing costs, water charges will vary by system.

**Chapter 6****Human Resource Development****for Agriculture****Concept and Objectives**

The primary objective to be met in the human resources constraint area was to strengthen the institutions providing trained people for the ambitious rural development program upon which the GOZ embarked after Independence. These institutions included both the agricultural colleges and the University of Zimbabwe. The agricultural colleges at Gwebi and Chibero provide three-year diploma-level training; a specific goal was to increase the number of students receiving diplomas from the two colleges from 80 per year to 120.

Degree personnel are trained at the Faculty of Agriculture of the University of Zimbabwe. The faculty includes three departments: Crops Science, Animal Science and Land Management. The objectives of ZASA were to increase undergraduate enrollment, develop faculty, strengthen graduate training, and provide practical training for students. The annual intake of students was to be approximately doubled, from 50 students each year. Furthermore, a practical year was to be added to the degree program and one or two new departments established. The achievement of these objectives would require additional staff, staff training and an enlarged recurrent budget.

**Findings****Background and Context**

After Independence, Zimbabwe lacked trained personnel to work in agriculture, particularly to provide services to small farmers. Many experienced agriculturists had left the country after Independence. Although at the time, agricultural education and training in Zimbabwe were provided at degree, diploma, and certificate levels as well as through more informal training, historically, insufficient investment in agricultural education had contributed to the lack of available personnel and also had hindered potential training capabilities. Not only did projected increases in the agricultural extension service create the need for human resource training, but implementation of agricultural development plans also hinged on the availability of adequately trained personnel at all levels.

**Procedures**

ZASA attempted to improve the human resources available in agriculture through support of the following agricultural education and training institutions: University of Zimbabwe, Chibero College of Agriculture, Gwebi College of Agriculture, Wensleydale Farm Training Center, Kadoma Cotton Training Center, Pig Production Training Center, and AGRITEX, including housing for staff of the Institute of Agricultural Engineering.

ZASA also funded overseas training through short courses, as well as MS and PhD training. Both types of training have been used by numerous government departments and agencies and the University. (Table E.6.1)

**Table E.6.1**

**Human Resource Training:  
Allocations and Expenditures**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
T.O.T. Course	AGRITEX	87	19,340		0
Short Term Trng. Abroad	MLARR	84/86		900,000	n/a
Kadoma Cotton Trng. Ctr. #	MLARR	87/90	1,818,399		498,298
Wensleydale Farm Trng.	MLARR	90	1,490,147		0
Pig Production Trng. Ctr.	Pig Industry Bd.	85/7	200,000		0
Farmers Coop. Training	Coop Dept	85/7	550,000		446,777
Higher Education	UZ/Agric.	83/90	7,702,987	5,054,244	7,137,373
Higher Education ##	UZ/Agric.	84/90	607,000		0
Ag. College Expansion	Gwebi College	86	2,250,000		0
Ag. College Expansion	Chibero College	86	1,550,000		947,740
Ag. College Irrig. Devt.	Chibero College	86	65,000		47,360
Ag. College Furniture *	Chibero College	86	45,000		34,627
Inst. of Agric. Engineering	MLARR	90	1,876,000		0
<b>Subtotal Human Resources/Education</b>			<b>18,173,873</b>	<b>5,954,244</b>	<b>9,112,175</b>
<b>Percent of Total</b>			<b>29%</b> of tot.Z\$ alloc.	<b>49%</b> of US\$ alloc.	<b>50%</b> of Z\$ allocated**

Source: USAID, MFEPD, November 1990

# MFEPD shows allocation of Z\$572,500; USAID shows allocation of Z\$1.8 million

## Allocated on USAID records but does not appear on MFEPD records

\* Allocated by MFEPD with USAID approval but does not appear on AID records

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

**Performance**

**University of Zimbabwe**

Substantial funds, the largest of all ZASA allocations, were provided for the Faculty of Agriculture to expand its staff training, curriculum, practical programs, and research capacity at both the undergraduate and graduate levels. In all, the University received approximately Z\$8.3 million and US\$5 million.

A major component of the UOZ funding was a Michigan State/Penn State contract that included both a technical assistance and a training component. Graduate training was to be strengthened in agricultural economics, animal science, food science, horticulture, soil science and statistics.

Practical training was introduced through the purchase of a University farm with Z\$1.3 million in funding from ZASA in April of 1984. The University farm, apart from its research and practical work, represents an endowment to the Faculty of Agriculture and is run on a commercial basis by a farm manager. The University of Zimbabwe (as well as the agricultural colleges) is sited on prime agricultural land which constitutes a major part of its endowment. The University extended a large loan for farm operating costs and equipment when it first acquired the farm. Profits from farm operations will have

repaid the loan by 1992. After that, the Faculty of Agriculture will be generating significant operating profits which could provide a source of funding for both capital investments in the farm itself and for other programs of the Faculty.

In spite of the new farm, practical experience for University-trained students is generally perceived to be lacking, particularly by prospective private sector employers. This criticism is partially misplaced in the sense that university graduates are trained to fill research, policy, training and government posts, rather than to manage commercial farms. Nonetheless, the shortfall in practical experience of degree students is recognized and the University is considering requiring a pre-qualification year spent on a commercial farm, as do the diploma granting colleges.

### **Agricultural Colleges**

ZASA funds provided support for diploma training at Chibero College of Agriculture (over Z\$1.6 million) and Gwebi College of Agriculture (over Z\$2.2 million). Gwebi began offering a diploma course for whites only in 1950 and began training blacks in 1980. Chibero was established in 1961 specifically to train black small and tribal land farmers. At present enrollment at both colleges is almost entirely black. The colleges are administered by the Ministry of Lands, Agriculture and Rural Resettlement (MLARR). Both offer a two year course for diplomas in general agriculture and are designed for students interested in careers as farmers, as farm managers, in agricultural extension, or in agribusiness.

Chibero was the first to receive ZASA funds for diploma training and extension agent development. As an integral part of their program, students spend the first year of their studies on a commercial farm acquiring practical experience in farm management. (ZASA support for providing students with on-farm housing for this part of their program of study was proposed but never approved.) ZASA did provide funds for construction of new facilities and renovation consisted of expansion of the kitchen and dining room, lecture theater, library, dairy installations, grain dryer, staff houses, worker housing, and construction of female hostels. Prior to 1980, no agricultural colleges admitted female students. ZASA funds were committed to building hostels for 40 female students, without which training of women would not have been possible. Chibero thus expanded student capacity from 80 to 120.

### **AGRITEX**

AGRITEX received limited ZASA support for staff training and development. Although it identified a need for long-term support to put the department on a sound footing, funding for such training was not provided. AGRITEX proposed a training approach to ZASA; however it was not allocated funds. AGRITEX staff explained that they were not invited to the ZASA Working Group meeting at which this request was discussed and therefore did not have the opportunity to defend their proposal. Instead, as has been the case frequently in recent years, a junior member of the parent Ministry defended the submission.

AGRITEX staff has expanded only moderately since Independence, pursuing, instead, a policy of increasing staff effectiveness through productivity improvements funded by ZASA, the World Bank and other donors. In 1981, there were 1200 extension

workers in the field; at present the number has grown to 1662, an increase of 38%. While AGRITEX has been able to provide a desired level of service to the small farmer community with a relatively low level of staff, institutional problems remain. Although personnel retention is not problematic at the extension worker level, the high turnover of subject matter specialists is a problem for AGRITEX. The average length of employment for specialists is 4 to 5 years. Presently there are 80 officers with less than 6 months of experience. Government is not able to provide salaries that are competitive with the private sector; therefore trained professionals often seek employment in commercial agriculture. The extension service is in effect the school at which agricultural university and diploma graduates gain experience which then benefits the private agricultural sector. It is worth noting, however, that most of those leaving AGRITEX continue to pursue their professions within Zimbabwe and therefore their loss to AGRITEX is not a net loss of trained personnel to the country.

ZASA also provided on-site housing for AGRITEX's Institute of Agricultural Engineering staff. The project was approved tentatively for Z\$1,876,000 on March 8, 1990 for 100 employee type houses, 14 F-14 houses and 12 professional staff houses, all cleared by the Ministry of National Housing and Public Construction. Based on specifications provided in the project proposal, these houses appear to be of a standard size for relevant levels of public servants. Because of time constraints, the evaluation team was not able to visit these houses to inspect their construction in person.

### **Cotton Training Center**

The Cotton Training Center at Kadoma, which received substantial funding from ZASA, is managed by the Commercial Cotton Growers Association. The communal sector Cotton Production Training Program consists of three-week residential cotton production courses and follow-up visits for communal farmers. AGRITEX selects group leaders from farming areas throughout the country to attend courses that provide practical demonstrations. Follow-up visits to trainee farms constitute an important part of the program, and differentiate this program from most other training efforts which fail to follow-up with on-farm visits to reinforce the training experience.

### **Wensleydale Farmer Training Center**

Wensleydale Farmer Training Center was established in 1989 to train both farmers in the communal sector and livestock employees in the commercial farming sector. The training center, supported by substantial funding from ZASA, is devised to be eventually self-supporting through a trust that is supported by the Commercial Cattle Producers Association.

## **Impact**

### **Efficiency**

#### **Agricultural Colleges**

ZASA funds have strengthened human resources in agriculture at all levels, while exposing weaknesses that are detrimental to college effectiveness. ZASA has improved

facilities, including libraries and staff housing, and contributed significantly to increasing the number of women employed in agriculture by opening up training opportunities for them. On the other hand, operating funds at the colleges have decreased in real terms and expenditure per pupil has declined in the past few years. (Table E.6.2)

**Table E.6.2**

**Human Resources Training:  
College Running Costs,  
Allocations & Salaries (in Z\$)**

Fiscal Year	Total Allocations	Consumer Price Index	Adjusted to CPI	No. Students	Per Student	Entry Salary	Sal. Adj. to CPI
1983/84	322000	158	322000	80	4025	5724	5724
1984/85	319000	178	283635	80	3545	6024	5356
1985/86	313000	195	253220	80	3165	6864	5553
1986/87	331000	223	234731	80	2934	7656	5429
1987/88	361000	248	230085	80	2876	7656	4880
1988/89	387000	264	231176	80	2926	8580	5125
1989/90	450000	291	243744	100	2437	9804	5310
1990/91	530000	334	250869	120	2090	15888	7520
Change 83/90	39%	111%	-78%	33%	-52%	64%	24%

Source: MLARR

A major problem at present is the lack of government resources to provide adequate remuneration and other incentives to staff. Staff turnover has been high at both colleges. Gwebi, for example, had four principals in two years and a principal at one of the colleges was dismissed for alleged sexual harassment of female students. Such problems of staff turnover are evident not only at the colleges but among extension specialists. Students and extension field workers are disadvantaged because of the lack of sufficiently experienced instructors and subject matter specialists. Also, as a result of low government salaries, many trained professional agricultural personnel are working in the commercial sector, rather than with the communal farmers.

When the evaluation team visited the colleges it found that at both, farming operations are almost at a standstill. Both Gwebi and Chibero College farms are suffering from a shortage of operating funds and are underutilizing their farms and facilities. For example, the grain dryer at Chibero has the capacity to dry large amounts of grain, but has never been used because the College farm does not have the resources to produce sufficient grain. The new dairy facility has the capacity to milk 200 cows, but at present the college is milking fewer than 10 cows due to financial constraints.

The reason for this is a short-sighted Treasury view of the colleges' roles and activities. Farm operating surpluses are returned to government. Each year the Treasury, because of its concern with government's continuing large budget deficits, cuts funding to the colleges. Apart from falling real salaries for staff and falling real expenditure for students, farm operations have been cut back every year. (Table E.6.2) Land, equipment and the skills, knowledge and labor of faculty and students have been sidelined. Morale is low and the colleges are increasingly viewed as high schools by the agricultural industry. Together these problems are impediments to successful graduate placement in commercial farming operations.

## College Farms: Practical Training for Degree and Diploma Students

College and University farms have become an integral part of efforts to improve the efficiency and effectiveness of higher education for agriculture in Zimbabwe. The idea of the agricultural colleges and the Faculty of Agriculture at the University being largely self-financed is in keeping with the national development philosophy of self-help, self-reliance, and of education with production. The colleges have long had operating farms associated with them while ZASA made purchase of a farm possible for the University. MLARR is considering a revolving fund for college farm operation. A decision is urgently needed on this question since the colleges could be largely self-financed if their farms were allowed to keep the profits they generate.

An interesting approach, recently discussed by some college and university leaders, involves setting up trusts to run each college farm. Faculty, expected to have a long-term relationship, could become employee-owners through the concept of job-ownership or buying in, but with initial loans from the Trust offset by dividend and management payments. Students could receive wage payments and, with faculty and full-time farm staff, profit shares.

### General

With regard to the efficiency of financial expenditure and reimbursement, human resource development activities have faced additional difficulties. By June 1990 only 50% of their allocations were recorded by MFEPD as expended. (Table E.6.1, above) While projects may have been completed using credits, reimbursements were generally significantly delayed.

### Effectiveness

#### University of Zimbabwe

The planned increase in student capacity from 50 to 110 students per year has been reached and could not have been achieved without ZASA funding. At least three-quarters of this overall increase has been directly attributed to ZASA. Likewise, the University farm gives the students an opportunity to attain direct, hands-on practical experience in farm operations and farm management, which would not have been possible without funds provided by ZASA. (Table E.6.3)

**Table E.6.3**

<b>First Year Enrollment in Faculty of Agriculture, University of Zimbabwe</b>
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Year	Total
1980	35
1981	39
1982	43
1983	54
1984	65
1985	63
1986	104
1987	103
1988	104
1989	108
<b>Total</b>	<b>718</b>
<b>Percent</b>	<b>100%</b>

Source: University of Zimbabwe,  
Faculty of Agriculture, 1990

### Agricultural Colleges

The principal at Chibero at the time of ZASA funding reported that the construction of female hostels was ZASA's major impact at the colleges. Chibero's initiative to train women has, in turn, had an impact on other institutions and opened the way for the acceptance of women into agricultural positions. Unfortunately, Chibero has not been able to enroll enough women to fill the spaces in the female hostel. Present enrollment is 104 students; 28 women are enrolled (70% of the hostel capacity of 40 places for women). College administrators are not interested in increasing enrollment due to lack of adequate jobs for graduates. Funds were also provided to Gwebi to expand its student enrollment from 80 to 120 students. As at Chibero, hostels were built to house 40 female students. Gwebi began admitting women in 1989, but still has not filled the female hostels. (Table E.6.4) This is discussed further in Chapter 7, "The Role of Women."

**Table E.6.4**

<b>First Year Enrollment at Chibero College, 1981-85</b>
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Year	Enrollment
1981	40
1982	45
1983	41
1984	69
1985	63

Source: Mugabe, 1986

Both male and female graduates from the agricultural colleges have had some difficulty in obtaining jobs after graduation despite the requirement of one year's practical experience on commercial farms that was established to prepare students to work in the commercial sector. Over half end up as teachers in lower schools; however,

only a few of these teach agriculture and most, in fact, make little use of their training in agriculture in their teaching. While an adequate survey of graduates has not been done, program administrators at MLARR are concerned that many graduates are underemployed as teachers in non-agricultural education, rather than working as agricultural extension workers or in the commercial agricultural sector. The principal at Chibero estimates that 80% of the 1989 class took jobs as agriculture or science teachers because of a lack of jobs in commercial agriculture or government service.

## AGRITEX

The use of new equipment, including communication radios funded by ZASA and transportation funded by the World Bank, permitted AGRITEX to carry out its duties with a smaller increase in its staff than would otherwise have been necessary to achieve the same level of extension services. At the same time the failure of AGRITEX to expand its staff has provided a major disincentive to students interested in studying and pursuing a career in agriculture. However, training of trainers programs, funded by ZASA, have helped incrementally to increase the expertise of existing staff.

At Independence there were no female extension workers. Present estimates are that 8-18% of extension workers are women.<sup>43</sup> Several AGRITEX staff reported that although AGRITEX does not discriminate by gender in hiring, there is a preference for male extension workers among some provincial officers. ZASA programs, as outlined in Chapter 7, "The Role of Women," have helped increase the available supply of trained women agriculturalists and thus has contributed to the modest growth of female extension agents.

Chibero and Gwebi have large farms attached to each college. In the past the farms were active, providing students with a commercial farm environment. ZASA investments, notably the large grain dryer and dairy at Chibero, were intended to bolster the operations of the college farm; these facilities are currently not operating at anywhere near capacity.

### Cotton Training Center

The center currently trains approximately 600 farmers annually, 300 funded by ZASA since 1987 and an additional 300 funded by the EEC. In all, 325 individuals were trained in 1988 against an initial target of 400 (81% of target). However, to arrive at the 81% figure, it was necessary for the Center to add a course beyond the two originally scheduled, since courses were only half filled. Nevertheless, AGRITEX relies almost exclusively on the Center for training staff and communal farmers in cotton production. It also follows up on its students through the use of 8 check scouts who make monthly visits (as a minimum) to trained farmers throughout the growing year. CTC is well placed to provide more in-depth training than could be provided by AGRITEX directly. Ten AGRITEX field officers attended training in 1988; 26 extension workers attended in 1988 and 98 more attended courses in 1989. According to an MLARR report only a little more than 5% of the trainees in 1988 were women.

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<sup>43</sup> AGRITEX does not have gender disaggregated information on its employees.

The Center, with funding from ZASA, conducts 30 courses annually on crop husbandry, cattle, pigs, and poultry. Farmers are brought in from the surrounding area for 2-7 day residential courses. Estimates are that 1/3 to 1/2 of the participants attending courses are women. In one area, a woman trainer teaches courses on poultry and pig production that are attended predominantly by women. ZASA funds have been approved to develop the training program, but have not yet been allocated.

### Pig Industry Board

The Pig Industry Board provides training at its pig feed lot operation near Harare and at another outside Bulawayo, recently established with funding from ZASA. The Bulawayo enterprise, though quite profitable financially, is not achieving its goal as a farmer training institution. Only 11 farmers have been trained thus far, and all were men; the house for trainees does not have provision for separation by gender nor have separate courses for women been established. In fairness, it should be noted that the Bulawayo facility has been in operation only a year and that in the future greater emphasis may be given to training once the initial problems of setting up an enterprise have been overcome. One way this might be accomplished is by giving the enterprise a greater degree of autonomy in the management of its resources, rather than having to return all profits to the GOZ treasury and then having to request allocations for even minor items; incentives should be established so that the enterprise has a real interest in providing training, rather than simply running a reasonably successful pig feedlot operation.

### Farm Apprenticeship Scheme

Early on ZASA was approached to fund the "Farm Apprenticeship Scheme." Prepared by the Commercial Farmers Union, government and colleges, this scheme required funding to build suitable accommodation for students on farms, to oversee farm placement, and to supervise and support the work of the students in the field and in their relations with the farmers who host them. At minimal cost to government, the colleges were to be relieved of responsibility and expense for the students' first year of the three year program and would thereby be able to expand student intake by 50%. Moreover, working knowledge of commercial farming operations would provide the colleges with students, not unlike Peace Corps Volunteers, able to challenge the practical knowledge of faculty. The fund therefore was intended to assist the college faculty to become acquainted with farm operation.

The proposal hinged on providing suitable housing for students on the farms where they were to serve their apprenticeships. A view prevailed that government could not fund non-government ventures, including buildings on private property, and the proposal was turned down by ZASA. About that same time, ZASA refused to provide funding for an NGO (Silveira House); the reason given was that only public sector investments already approved in the PSIP could be funded.

However, ZASA has recently established a new and important precedent by funding non-government ventures, for instance Wensleydale and the Cotton Training Center. It seems proper for ZASA to reconsider the Farm Apprenticeship Scheme. Housing

for students can be provided by a trust fund with appropriate legal safeguards. For instance, if a farmer dropped out of the scheme, then after two years, the trust could sell the housing to the farmer according to a pre-agreed formula for depreciation. The limited earlier view of ZASA funding being restricted to public sector programs is no longer in keeping with practice or with the need to augment limited fiscal resources in imaginative ways.

Abandonment of a fully supported Farm Apprentice Scheme has been a serious loss to agricultural education. It would bring the colleges, students and commercial farmers closer together. Disappointment with commercial farm hiring of college graduates might be lessened if commercial farmers were in closer contact with students.

## **Conclusions**

- The ZASA program can take full credit for almost doubling the intake of agricultural graduates at the University of Zimbabwe, as well as for significantly strengthening faculty expertise, curriculum, and practical training components of university level training
- ZASA funds purchased the University farm, providing the equivalent of a long-term endowment as well as increased opportunities for practical training for students
- ZASA allocations enabled the nation's two agricultural colleges to admit women for the first time as well as to improve other college facilities, including libraries and staff housing
- Programs for farmer training through government and parastatal programs have been enhanced through support from ZASA, including programs involving women
- Innovative and promising NGO-sponsored programs have received critical support from ZASA, providing farmer training, technical support, and practical experience; these have expanded information available to farmers at little or no cost to government
- Significant weaknesses remain in human resources development which must be addressed if Zimbabwe is to achieve its objectives of providing trained and experienced agricultural staff to the communal sector and of ensuring that smallholders receive the full range of training they require to make full use of available agricultural knowledge

## **Recommendations and Lessons Learned**

- Any remaining ZASA funds should be earmarked for ensuring that funds already allocated are fully and effectively utilized, particularly to strengthen practical training, and to make appropriate conversions such as the needed modifications of ZASA-funded hostels at the colleges. Opportunities include funding to:
  1. Ensure, through discussions with MFEPD and MLARR, that the Faculty of Agriculture benefits directly from future University farm profits and farming operations; this requires adequate funding for farm operations in the short-term and mechanisms for self-financing after the loan from the University is paid off.

2. Develop a program for self-finance of college farm operations similar to that of the University of Zimbabwe farm.

Ideally such a program would include a profit-sharing plan for both employees and student workers. It is simply not possible to run a farm operation through a centralized treasury account. Direct control must be vested in professional farm managers over necessary and urgent expenditures within general guidelines of an overall farm plan and with oversight of a committee knowledgeable in commercial farm operations, preferably alumni of the institution. Such a system would provide students with the opportunity to learn farm management skills which depend as much, if not more, on financial skills as on the agronomic and livestock management expertise of the farm operator.

3. Utilize the University's research capacity, developed with substantial support from ZASA, by supporting policy-related research, particularly in areas where ZASA has provided support in the past or where a successor project plans to provide support in the future.

There is a critical need for this type of research because of the lack of adequate follow-up and monitoring of the impact of the project. Policy research could be funded with ZASA local currency still available and therefore could and should begin immediately.

4. Increase efforts to place graduates from the colleges in practical positions where their talents can be fully utilized, particularly by reviewing the original Farm Apprentice Scheme Fund and extending its operations to include post-college farm/company management apprenticeships.
5. Facilitate the expanded enrollment of women in Chibero and Gwebi Colleges; the strenuous physical aspects of the selection interview should be eliminated, since these are not relevant to either the training or subsequent work that students will have to perform.
6. Promote profitable commercial operations on university and college farms.

The University should do custom grain drying for commercial farmers at the going rate for such service, if its own grain and dairy production is not sufficient to maintain operation of these facilities at near-capacity levels.

The University might also encourage students and faculty to bring in their own dairy cattle, with a percentage of the proceeds from milk production allocated to cover the cost of feeding and caring for the animals.

New funding is required and should be targeted at providing follow-on support to strengthen further institutions already allocated funds and to explore possibilities for expanded NGO involvement in education and training. Specifically it is recommended that new funding:

7. Support continuing faculty development at the University of Zimbabwe and encourage practical, on-farm training to supplement theoretical classroom work.

The Farm Apprentice Scheme should be seriously re-examined with an eye to redesign and implementation. ZASA, or its equivalent, should provide

additional support for at least five years, under the same rubric, for farm-manager internships for students following graduation. This scheme could extend to NGOs, parastatals, banks and agro-service companies.

8. Develop training programs that are potentially self-supporting and that will reach the communal farmers through such institutions as the Wensleydale Training Center, the Cotton Training Center, and the Pig Industry Board.

Now that the policy has finally been established permitting funding of NGOs by ZASA, both public and private sector training institutions should be funded to address problems in the human resource constraint area.

9. Change the overly centralized administration of the Pig Industry Board operation near Bulawayo to provide professional staff on site with the budget needed to address day-to-day problems.

The operation needs to be provided with incentives that make training, as well as raising pigs, an attractive proposition. Likewise, farmers should be trained in the financial aspects of pig-raising projects as well as in the purely veterinary issues.

10. Provide short-courses for professional staff development in the university, colleges, AGRITEX and governmental agricultural sector institutions.

If additional foreign currency funding becomes available, MS/PhD training should be supported as a dual strategy for improving the quality of personnel and for retaining staff.

## Chapter 7

## The Role of Women

## Background and Context

## The Situation of Women in Zimbabwe

While never directly included in ZASA program objectives, the role of women has been of continuing importance to Zimbabwe's post-independence government. In 1980 the Zimbabwe government made a commitment to eliminating discrimination against women. It recognized that women had fought side by side with men in the struggle for Independence and thus it established a policy to improve the status of women.

Women's disadvantaged position is a result of both traditional patrilineal society and colonial policies that deprived women of rights and encouraged dependence on men. Polygamy, bride-price, and patriarchal relations in the family have all contributed to women's subordinate status<sup>44</sup>. With the intrusion of colonialism, men migrated from rural areas to work as semiskilled laborers on farms, in factories and industries.<sup>45</sup> Women's participation in the formal economy was limited since women remained in the rural areas to provide for their families' subsistence. At present, nearly half of the households in most rural areas are headed by women. (Table E.7.1)

Table E.7.1

<b>Role of Women: Female-Headed Households by Province (Percent)</b>
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Province	Female (%)
Manicaland	43%
Mashonaland Central	48%
Mashonaland East	47%
Masvingo	46%
Midlands	44%

Source: ILO/Jaspa, 1986

Women in female-headed households frequently have only limited access to land, credit, and other sources of income. Polygamy continues to be widespread in Zimbabwe, although data on its prevalence vary widely. One study in Mashonaland West found that 20% of households were polygamous<sup>46</sup> and another found that 57% of married men had more than one wife.<sup>47</sup>

Passage of the Legal Majority Act in 1982 paved the way for removal of legal barriers for women. Prior to passage of this act, women were legal minors with guardianship passing from their fathers to their husbands upon marriage. In 1981 the

<sup>44</sup> Batezat and Mwalo, 1989

<sup>45</sup> Ministry of Community Development and Women's Affairs, 1985

<sup>46</sup> Zwart, 1989

<sup>47</sup> ...

Ministry of Cooperative and Community Development and Women's Affairs (CCDWA) was established to improve the position of women in Zimbabwe. The first minister of this program explained:

The policy of this Government aims at the transformation of women's status so that they can assume their rightful role in society as participants alongside men on the basis of equality.<sup>48</sup>

However, the Ministry soon found that women's status could not be immediately transformed through government decree. The Ministry wrote in 1985 that:

Die-hard negative attitudes about women acquired from centuries of tradition and practice continue to colour and cloud the thinking of many men as well as women themselves. Changing these attitudes is necessarily a slow and sometimes painful process. Hence many of the Ministry's suggestions and programmes receive only lukewarm support at best and are therefore ranked very low in the allocation of scarce national resources such as funds and adequate manpower.<sup>49</sup>

## Findings

### Women in Agriculture

Women are recognized as the major contributors to agricultural production in the small-scale and communal sectors. Estimates suggest that women constitute 70% of the farmers in communal areas and contribute 80% of the agricultural labor.

The division of labor in agriculture by gender varies by task and crop. Table E.7.2 shows the variation in agricultural tasks. Women, either with their husbands or alone, perform 42% of plowing, 75% of planting, 41% of weeding, 43% of transporting, 31% of manure handling, 37% of winter plowing, 65% of gardening, and 24% of cattle herding. In addition, women are responsible for the majority of other tasks in rural households. Specifically, women perform 81% of fuel wood gathering and 96% of cooking, collecting water, and caring for children. They also play an important role in smallholder dairy.<sup>50</sup>

Table E.7.2

**Performance of Agricultural Tasks  
By Family Member (Percent)**

	Plow	Plant	Weed	Transport	Manure	Winter Plow	Garden	Cattle Herding
Wife	24%	63%	28%	16%	22%	16%	52%	17%
Husband	18	6	37	25	1	39	16	27
Both	17	12	14	27	9	1	3	8
Children	10	6	11	12	6	14	5	17
Hired Labor	8	3	2	7	6	4	1	9
Work Group	4	2	2	3	6	2	1	5
Other	13	2	2	2	2	2	1	3

Source: Johnson, 1988

<sup>48</sup> Batezat and Mwalo, 1989

<sup>49</sup> Ministry of Community Development, 1985

<sup>50</sup> Zwart, 1990

The gender division of labor varies by crop as well, as shown in Tables E.7.3 and E.7.4. The first table, representing major responsibility for different tasks by gender, shows which family members take on the majority of the work associated with each cropping job. In the second table these labor contributions are consolidated for all tasks and are represented by percentage of labor contributed by gender.

**Table E.7.3**

**Gender Division of Major Labor Input for Important Crops by Task**

Crop Type	Task	Major Labor Input by Gender
Millets and Sorghum	Plowing	Men
	Hoeing	Women
	Planting	Women
	Transplanting	Women/work parties
	Harvesting	Women/men
	Threshing	Women/men/work parties
	Winnowing, Transport	Women /children
	Marketing (cash)	Women
Maize	Plowing	Men
	Hoeing	Women
	Planting	Women/men
	Weeding	Women/children
	Harvesting	Women/men/children
	Shelling	Women/children
	Transport & Storage	Women
	Marketing	Women
Groundnuts	Hoeing	Women
	Planting	Women
	Weeding	Women
	Harvesting	Women/children
	Transport & Storage	Women
	Marketing	Women
Beans and Sweet Potatoes	All Tasks	Women

Source: Johnson, 1988

Women are clearly the backbone of maize, groundnut, small grain, and bean and sweet potato production. Maize is produced as both a food crop and a cash crop. Compared to other crops there is a high degree of cooperation between men and women in the production of maize.<sup>51</sup> Groundnuts are traditionally a woman's crop. Women produce groundnuts as a source of food for the family and to augment cash income. Unlike when maize is sold, women typically control the income from the groundnuts they sell. Thus groundnuts constitute a small but important and consistent source of income for women. (Table E.7.3 & 4)

**Table E.7.4****Gender Division of Labor by Crop**

Crop	Male	Female	MF
Cotton	21%	29%	50%
Maize	15%	23%	65%
Groundnuts	13%	67%	20%

Source: Skapa, 1988.

Women also contribute the majority of labor required to produce cotton. This crop is extremely labor intensive with women often performing the physically arduous tasks of hauling water, weeding, and picking. (Table E.7.4) Despite their hard work, women do not have commensurate access to the benefits of their labor since men generally control the income from cotton sales. The marketing boards make payments directly to the registered head of household, usually male, whether or not this is the actual producer. Female cotton producers are not interested in increasing production without a guarantee that they will receive both income and technical assistance to decrease their labor input.<sup>52</sup>

Although women are the major agricultural producers, discrimination based on gender inhibits their ability to earn decent incomes for themselves and their families and to contribute fully to increased food and agricultural production. Women have only limited access to land, credit, agricultural inputs, markets, education, and extension services. Passage of the Legal Majority Act of 1982 paved the way for women to gain formal legal status in Zimbabwe. Prior to 1982, women were prohibited from owning land, having access to credit, holding bank accounts, or making contractual arrangements. The Act provided women with the possibility of owning land, obtaining credit, and having legal access to income from their crops sold by the marketing boards. Prior to Independence, women were not admitted to agricultural colleges and there were no women in the agricultural extension services. Similarly the Agricultural Finance Corporation (AFC) in 1983 made new provisions for lending to married women in their own right, provided the Corporation is satisfied that the woman is a farmer.

## **Impact**

In order to evaluate the impact of ZASA on women in agriculture, information was obtained on how women were affected in relation to the seven designated constraint areas in the small holder sector including (1) agricultural research, (2) agricultural extension, (3) agricultural credit, (4) market input and supply, (5) land and water use, (6) human resources and training, and (7) policy planning. These will be dealt with, in turn, in the following sections.

ZASA was directed primarily at improving the small-holder sector, where women play a major role. Surprising for the 1980s, however, project documents did not specifically target women as beneficiaries or discuss how women would be included in project benefits. This despite the fact that the majority of the farmers in the small holder sector are women, and thus ZASA objectives could be accomplished only through the participation of women.

Changes in agriculture since Independence have resulted in increased productivity for communal farmers. More accessible credit, marketing, and extension facilities have brought increases in production, especially in maize and cotton. Women benefitted from the overall improvement of agriculture in the communal sector although benefits were unevenly distributed there. The beneficiaries in the small-holder sector were the wealthier farmers and many women are among the poorer farmers. Specifically, although production increases in communal areas were substantial, they were largely confined to a small portion (20%) of households that were situated in the more favorable natural regions in Mashonaland and Midlands.<sup>53</sup> ZASA funds, however, were instrumental in increasing the number of women trained in agriculture through support of Chibero and Gwebi Agricultural Colleges. ZASA would have improved its success by targeting women as beneficiaries in each of the constraint areas addressed by the project.

### Research

The redirection of research to assist communal farmers benefitted women producers. Improvements in maize production were readily adopted by women farmers whose production contributed substantially to overall increases in maize production in the communal areas. However, much of this research focused on high use of inputs which were not readily available to women farmers due to both extension and credit systems oriented toward men. Farming systems research that assesses the household production system by taking account of labor requirements and male migration systems is more sensitive to women's concerns than commodity-specific research. Likewise, women would benefit from a greater emphasis on crops they dominate, such as millet and groundnuts, in addition to research on cotton and coffee, the proceeds of which are largely controlled by men. Furthermore, women need research into improving harvesting, processing, and storage, as well as on increasing production.

### Agricultural Extension

Enhancement of the extension service for smallholders has indirectly benefitted women farmers but few, if any, direct efforts have been undertaken with ZASA funds to improve the status of women farmers. Prior to 1981 there were no female extension workers. And even today AGRITEX does not have gender disaggregated data on its extension workers. Present estimates are, however, that no more than 8-18% of extension workers are women which, while an improvement, does not significantly enable AGRITEX to reach women farmers effectively. ZASA's major contribution to extension efforts for women has been to provide a base of trained women through funding of facilities that enable Chibero and Gwebi Agricultural Colleges to train women for careers in agricultural extension.

Nevertheless, the vast majority of extension workers are men and extension programs are geared to male farmers. This poses a problem since Zimbabwe women farmers are more comfortable meeting with female extension workers than with their

male counterparts.<sup>54</sup> In fact, women are more likely to participate in extension programs when they are run by women agents.<sup>55</sup> Traditionally, it is inappropriate for a male extension agent to work with a woman farmer except in groups. Studies have shown that it is difficult for women farmers to articulate their needs to male extension workers.<sup>56</sup> Training that sensitizes extension workers to the special needs of women farmers is not currently provided.

Extension workers direct their programs primarily to master farmers, who until recently have been predominantly men. The master farmer program began about fifty years ago to develop a small group of elite black farmers. It was initially open only to men despite women's widespread participation in agriculture. Over time, the master farmer scheme has trained more women. While only two out of ten of the trainees were women in 1978/79, AGRITEX data suggest that by 1986/87 20% more women than men completed the Master Farmer Training course. (Table E.7.5.)

**Table E.7.5**

**Completion of Master Farmer Training Course by Gender**

Year	Male	Female	Total
1978/79	733	177	910
1979/80	1,427	683	2,110
1980/81	1,996	1,005	3,001
1981/82	1,970	1,440	3,410
1982/83	4,290	2,120	6,410
1983/84	4,390	2,170	6,560
1984/85	3,890	4,101	7,991
1985/86	6,208	6,140	12,348
1986/87	6,300	10,544	16,844
1987/88	9,900	12,000	21,900
Total	41,102	40,380	81,373
Percent	51%	49%	100%

Source: AGRITEX; Chiganze, 1989

The majority of women in rural areas are illiterate and therefore cannot utilize the more advanced extension material. The content of the extension effort is primarily concerned with cash crops such as cotton, coffee and maize. Little information is provided about traditional women's crops such as groundnuts and small grains and only limited attention is given to the other agricultural activities that women undertake such as food processing, food storage, and care of poultry and small livestock, particularly pigs. Currently there is discussion of starting a home economics and nutrition component within AGRITEX.

Extension programs have tended to focus on communal areas in the more favorable natural regions.<sup>57</sup> Semi-arid food crops which can be grown in many communal areas in Zones 4 and 5 are not stressed. These areas, with the greatest need and the least attention, are also where women are particularly involved in the production of small grain crops.

<sup>54</sup> Mutuma, et. al., 1989

<sup>55</sup> Saito and Weldeman, 1990

<sup>56</sup> Ministry of Community Development and Women's Affairs, 1985

<sup>57</sup> Mutuma, 1989

## Agricultural Credit

The AFC is the main provider of credit and has not discriminated explicitly against women since 1982, when women were first legally able to obtain credit in their own names. Only a small percentage of small-holders have access to credit, however, and these tend to be the wealthier farmers. Although the gender of loan applicants is recorded on the applications, AFC has not analyzed the data. Involved loan officials, however, estimate that between 30 and 40% of the borrowers are women, while a comparative analysis of credit for women in agriculture in selected African countries suggests that women in Zimbabwe receive approximately 10% of agricultural credit from all sources (Table E.7.6).<sup>58</sup>

Many women are organized into groups, but the AFC does not lend to women's groups. Although approximately one-half million people are organized into rural savings clubs and rotating savings and credit groups, with the majority of the members being women, currently the level of savings of these groups is generally low and not sufficient to purchase agricultural inputs.

**Table E.7.6**

### **Agricultural Credit Disbursements by Selected Countries**

US \$ million	Kenya	Malawi	Sierra Leone	Zambia	Zimbabwe	Total
Total est. disb. to agric.	\$437.0	\$50.0	\$0.4	\$40.0	\$50.0	\$677.4
Est. credit to smallholders	40.0	11.0	0.4	12	16.5	69.1
Est. credit to women	5.0	2.2	—	0.1	1.7	9.0
% credit to women	12.5%	20.0%	10.0%	8.3%	10.3%	13.0%

Source: FAO, 1988.

## Market Input and Supply

The major marketing problems for women are access to transportation and counterproductive marketing board procedures. Nonetheless, ZASA funding of storage and marketing facilities near communal areas has benefitted women as well as male farmers. Although both women and men have transport problems, women have less access to oxen carts, scotch carts, and cash to pay truckers than do men. In selling their crops, women have to rely on middlemen. Marketing is especially problematic for women's perishable crops such as vegetables and fruits; preservation of such crops is limited, women are often unfamiliar with pricing systems, and transport is either not available or quite expensive (Kachingwe, 1986).

<sup>58</sup> FAO, 1988; the percentage of credit received by women in Zimbabwe is less than in Kenya and Malawi and more than in Sierra Leone and Zambia.

ZASA also funded dairy trucks to improve transport for dairy farmers, many of whom in communal areas are women. It is not clear that funding of dairy trucks has helped women since monthly milk checks normally go to the male household head rather than being paid in daily cash payments to the woman in her role as day-to-day decision-maker and family provider. Interviews with women dairy farmers suggest that they often sell their milk locally, rather than through the DMB because of low quantity produced, problems of transport, and lack of access to immediate cash.

Marketing Boards issue account cards to farmers to enable them to sell their crops. These are issued primarily to men, except in the case of female-headed households. A survey of women farmers reported that 42% had accounts in their own name, but in 35% of the cases the cards were issued only in their husbands' names (Table E.7.7). The checks go to the person whose name appears on the account; therefore women with husbands often do not receive the cash from their crops directly. Also, in an attempt to get around the "stop order" system, there has been an illegitimate use by men of women's names on marketing cards, which has not been of much real benefit to women.

**Table E.7.7**

**Grain Marketing Board  
Account Holders**

Holder	Percentage
Wife/Wives only	36
Husband only	35
Each has own card	6
Other	23

Source: Mutuma, et. al., 1989

The failure of many input supply cooperatives has been detrimental to both women and men. The exception is the fishing cooperatives that have been quite successful. Each cooperative has 2 women out of 16 members. The women are engaged in fish processing and report that their incomes have dramatically improved since joining the cooperatives.

**Land and Water Use**

Access to sufficient high quality land remains the major factor limiting production for both men and women farmers. Women's access to land is problematic, but cannot be separated from the wider national issue of land reform. Women's land rights vary among small-scale, communal and resettlement schemes. On small-scale farms, women have been legally able to own land only since 1982; consequently very few women currently hold title to land.

In the communal areas, land use rights were traditionally allocated to the male household head. Usually male heads allocated plots to women to grow crops such as groundnuts, cowpeas, finger millet, pearl millet and sorghum for household subsistence. Women traditionally had decision-making powers over these plots and controlled the

income from them. Land in communal areas continued to be allocated invariably to male household heads with few women having use rights to communal land.<sup>59</sup> With increasing land use pressure and increased production of cash crops, women's plots have been diminishing. Thus, women are losing access to the few land use rights which they held on communal land. On communal land, however, women continue to have access to household plots if their husbands are employed elsewhere.

The resettlement schemes legally can grant land to women. The major criterion for selection is that the beneficiary not be employed elsewhere. The general practice is to issue the land permit in the name of the husband, who has all rights and obligations. Married women seldom hold permits and only 7% of permits have been given to divorced, widowed, or single women.<sup>60</sup> Women without permits cannot obtain credit, services, or checks from the marketing board in their own names.

As for water, ZASA has provided funds for irrigation development on communal lands. Irrigation schemes have been problematic, however, because of equipment failures and the consequent lack of sufficient water. Women seldom hold rights to plots in irrigation schemes in their own names, although they perform the majority of labor in these schemes.<sup>61</sup>

### Human Resources and Training

Sufficiently trained personnel is a major obstacle for agricultural development in the small-holder sector of Zimbabwe. Prior to Independence women seldom, if ever, received education or training in agriculture. After Independence, the government recognized that women were the major agricultural producers in the communal areas and that improvement of agriculture was tied to their training.

ZASA has provided funds for education and training at the degree, diploma, and informal levels, including funds earmarked for female education. A major accomplishment of ZASA in providing training for women was the construction of female hostels at Chibero and Gwebi Agricultural Colleges. These hostels enabled women to attend the colleges and for the first time to be granted diplomas in agriculture. Chibero expanded total student capacity from 80 to 120 through construction of new student hostels. ZASA funds were specifically committed to building hostels for 40 female students for the purpose of training more women in agriculture. The principal of Chibero at the time of the initial ZASA funding reported that construction of the female hostels was the major impact of ZASA at Chibero.

Chibero's initiative to train women has had an impact on other institutions and has opened the way for the acceptance of women into agricultural positions. Many of these women have been employed as extension agents for AGRITEX; some have been employed by the commercial agricultural sector; a large number are teachers of agriculture and science. Unfortunately, Chibero has not been able to enroll enough women to fill the spaces in the female hostel. Present enrollment totals 104 students, of whom 28 are women. Increases in female enrollment from 1981 to 1985 are reported in

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<sup>59</sup> Sunga, 1990

<sup>60</sup> Chimedza, 1988; national level data on permit holders are not disaggregated by gender.

<sup>61</sup> One woman explained, for example, that she hoped to get an irrigated plot on the new scheme at Nyanyadzi, but would have to get the plot in her brother's name; field interview.

Table E.7.8. Women students at Chibero reported that they were treated fairly by the faculty once they arrived, but that admission requirements emphasized physical strength and therefore discouraged interested women from attending. Female applicants, for example, have been required to perform strenuous labor and carry heavy loads irrelevant to either their academic studies or their career options.

**Table E.7.8**

**First Year Enrollment at  
Chibero College  
by Gender, 1981-85**

Year	Females	Males	Total
1981	5	35	40
1982	7	38	45
1983	10	31	41
1984	21	48	69
1985	25	38	63

Source: Mugabe, 1986

Funds were also provided to Gwebi Agricultural College to expand its student enrollment from 80 to 120 students. As in the case of Chibero, hostels were built to include 40 female students. Gwebi began admitting women students in 1989 and has also not met the capacity of the female hostels. Few women apply for the available places. The principal of Gwebi reports that the female hostels are largely empty and the College may reconfigure the hostels so that men can use the extra space.

As outlined in Chapter 6, "Human Resource Development," both male and female graduates have been successful in obtaining jobs after graduation, although many graduates are underemployed. An adequate survey of graduates has not been carried out, but program administrators at MLARR are concerned that many graduates are underemployed as teachers, rather than working as agricultural extension workers or in positions in the commercial agricultural sector. The principal at Chibero estimates that 80% of the 1989 class took jobs as science or agriculture teachers. Anticipated expansion of agricultural extension field staff has not materialized and employment opportunities are limited. While just before Independence there were no women in the extension service, at present between 8% and 18% of AGRITEX staff are females. Although AGRITEX does not officially discriminate by gender in hiring, there is nevertheless a preference for hiring male extension workers among some provincial officers. They explain that they are reluctant to hire women because they might have children or get married and leave their jobs.

Funds provided for the enhancement of the Faculty of Agriculture at the University of Zimbabwe, although not specifically targeted for increasing the enrollment of women, have enabled expanded enrollment from 35 in 1980 to 108 in 1989 while the percentage of women has increased from 14% in 1980 to 19% in 1989. (Table E.7.9)

**Table E.7.9****First Year Enrollment in  
Faculty of Agriculture,  
University of Zimbabwe**

Year	Female	Male	Total
1980	14	21	35
1981	15	24	39
1982	14	29	43
1983	13	41	54
1984	16	49	65
1985	5	58	63
1986	9	95	104
1987	16	87	103
1988	15	89	104
1989	19	89	108
Total	136	582	718
Percent	19%	81%	100%

Source: University of Zimbabwe, Faculty of Agriculture, 1990.

A newly funded ZASA project at Wensleydale Training Center provides 2-7 day training courses for farmers, with women comprising about 50% of trainees. Women are most likely to be enrolled in poultry and small livestock courses. Wensleydale has hostels that can be used for both men and women and which allow women to bring their children to the Center. According to a female trainer, women are willing and able to come to courses, but when they take their ideas home, they are not able to carry out their plans because their husbands will not give them money and direct credit from the AFC is limited. Currently Wensleydale is training women to produce chickens for market. The women have few problems in production, but they have limited access to transport to purchase feed or to sell their chickens. The Wensleydale Center recognizes the special problems of women farmers and has targeted its training programs to address factors related to male and female decision-making roles. The women farmers suggest that training be linked with credit programs.

Kadoma Cotton Training Center has an excellent program that trains 600 communal cotton growers annually (300 funded by ZASA and 300 funded by the EEC). The Center relies on AGRITEX to recommend farmers for training. Women have not been targeted as a specific audience and currently comprise only 3 to 4% of the farmers trained.

### Policy Planning

While in some areas the ZASA working group has promoted innovation in program funding, it is clear that gender considerations have rarely been taken into account in policy planning. Although GOZ and USAID acknowledge that women are the backbone of smallholder agricultural in Zimbabwe, virtually no account of this fact is manifest in policy actions and priority-setting. Very few women are in decision-making positions in the relevant ministries and departments and there is not one female among the regular members of the ZASA working group. In the MLARR in 1986, for example, there are no women Permanent, Deputy, or Under Secretaries.<sup>62</sup>

<sup>62</sup> Mugabe, 1986.

## **Conclusions**

- Women are the primary agricultural producers in the small-holder sector yet were never identified as a target for attention under the ZASA program.
- Women continue to have limited access to land, credit, inputs, markets, education and extension services.
- ZASA's major contribution of ZASA to women in agriculture has been in education and training. It has had little, if any impact on women in agriculture in other areas.
- Detailed statistical analysis of the extent that women benefitted from ZASA, and/or all other agricultural programs, is hampered by the lack of gender disaggregated data.
- Women's major problems are the inability to gain access to adequate credit and resources to improve production and to control the proceeds from their production.
- Research on maize and other crops has benefitted women producers, but only a limited research effort has been devoted to women's crops such as groundnuts and small grains.
- There were no women extension workers prior to Independence and women presently comprise less than 1 in 5 extension workers. The increase is partially attributable to the training of female students at agricultural colleges, which was made possible through ZASA funding of female hostels at Chibero and Gwebi Colleges.
- AGRITEX does not target women farmers for extension assistance either in terms of the methodology employed or the content of its messages.
- ZASA funding of irrigation schemes offers the possibility of increasing the productivity of communal farmers, but few women are given access to irrigated plots in their own names.
- Policy planning has largely excluded gender issues related to agriculture; very few women are included as decision-makers in the MLARR or component departments.

## **Recommendations and Lessons Learned**

- It is recommended that funding only be made available for a future ZASA-type program if it clearly includes gender considerations in its design. Specifically, it is recommended to:

### **General**

1. Target women as direct beneficiaries of and equal participants in ZASA-funded projects. Specify the impact of funded projects by gender.
2. Ensure that the Central Statistics Office, MLARR, and other relevant organizations collect and analyze data that are gender-disaggregated, particularly regarding credit, land rights in communal and resettlement areas, extension workers, extension clientele, marketing board card holders, and senior level government policy-makers.

A nation-wide study of women in agriculture is clearly in order to assess women's needs and to develop strategies that would improve women's production and household welfare.

3. Use the information collected for the design and implementation of new programs that optimize benefits to women.

### Research

4. Promote on-farm trials and farming systems research that include gender issues.
5. Support research on crops that are typically grown by women such as groundnuts, finger millet, and pearl millet.
6. Incorporate all stages of the food system in research activities including production, harvesting, storage, processing, and nutrition.

### Extension

7. Increase the number and proportion of women hired as agricultural extension workers and subject matter specialists.
8. Focus extension on female managed farms; do not form a special women's department within AGRITEX.
9. Provide training for men and women extension workers on extension methodologies for reaching women farmers, including consideration of:
  - Group approaches to extension appropriate for women's groups
  - Relatively high illiteracy levels of women
  - Child care needs of women attending training
  - Women's conflicting time demands among domestic tasks, household production, and agricultural production
  - Women's limited access to land, credit, and income

### Credit

10. Offer loans to women farmers in their own names.
11. Increase the number of female credit outreach staff.
12. Increase the participation of women in successful cooperative ventures.
13. Offer smaller credit packages to women, especially through women's groups or through savings clubs, which are traditionally dominated by women.
14. Develop educational programs linked to credit packages for small producers.

### Market Input and Supply

15. Increase women's access to accounts in their own names; ensure that women receive payment for the crops they produce.

### Land and Water Use

16. Increase women's access to land, including irrigated land, in both the communal and resettlement areas.

### Human Resources and Training

17. Increase the number of women trained in agriculture at all levels; encourage fuller use of facilities funded by ZASA for women's education in agriculture.
18. Increase the number of female faculty, lecturers, and instructors in agriculture.

19. Provide funding for training women farmers through NGOs, such as the Cotton Training Center, Pig Industry Training Center, and Wensleydale Training Center.

#### Policy Planning

20. Include women's issues in policy dialogue, especially in relation to the effects of trade liberalization and structural adjustment; consider gender issues in macro- and micro-economic planning related to agricultural development.
21. Include women as decision-makers in agricultural development policy; include senior level women on the ZASA Working Group.

## Chapter 8

## Policy Planning

## and the National Economy

## Concept and Objectives

The designers of the ZASA program supported GOZ's goal of promoting "growth with equity." Within this context they saw as key, the GOZ's decision to extend the entire range of agricultural services to the small-holder farmer. This policy meant that all services, including training, research, extension, credit, input supply, and agricultural marketing created for commercial farmers would become accessible to smallholders. The extension of these to small-holders, however, implied growing subsidies and budget deficits, which government policy sought to reduce over time.<sup>63</sup>

The ZASA program demonstrated an understanding of (1) the unique role of private agriculture and agricultural support institutions in expansion of agricultural production, and (2) increasing marketed production and farm income in communal areas. Without a more adequate supply of foreign exchange, neither could private agriculture continue to expand nor could the institutions supporting agricultural marketing, credit and extension extend their services into communal areas. Secure land tenure for the private sector was guaranteed by Lancaster House agreements until 1990, making possible continued investments by commercial farmers; the GOZ was also firmly committed to expanding and transforming the institutions which had successfully promoted the growth of commercial agriculture in the past, bringing these institutions into the service of communal area farmers.

While the ZASA program sought not to change, but to support, stated government policies, a basic, underlying feature of ZASA implementation was on-going policy dialogue with GOZ, particularly concerning narrowing the resource gap between the commercial and smallholder sectors. To this end, policy objectives included:

- Expanding mutual understanding of the implications of development policies; and
- Encouraging the implementation of sound policies and the modification of policies which proved to be less well-conceived.<sup>64</sup>

Furthermore, because CIP-like sector assistance was considered innovative in Africa in 1982, it was felt necessary that annual review/evaluations be carried out by USAID. Continued funding was to be contingent on findings of progress in the achievement of these objectives. Major goals of GOZ policies to be monitored included the following:<sup>65</sup>

<sup>63</sup> USAID, Zimbabwe Agricultural Sector Assistance, PAAD Authorization (613-0209), 9/23/82: 1, 7, 15, 28-30; Zimbabwe Agriculture Sector Assistance (ZASA) Program Amendment, (613-T-607), 8/9/88:11-15.

<sup>64</sup> Ibid.: 3, 15, 21, 28, 50

<sup>65</sup> Ibid.: 55,56

- Allocation of a greater share of resources toward smallholders
- Reduction of producer and consumer subsidies
- Workable land resettlement policy
- Application of commercial interest rates to small farmers
- Increased communal area research on crops and integrated livestock systems
- Extension of price stimuli
- Expansion of extension and information
- Rural savings clubs
- Links between research, extension, and higher education, and
- Reduction in the real costs of inputs

## **Background and Context**

GOZ's strategy for development at Independence included as principal elements: (1) maintenance of a viable private sector in order to expand production, create additional employment, and increase exports; (2) initiation of a resettlement program to shift black farmers to underutilized land in the commercial farming areas; (3) reconstruction of infrastructure destroyed by the war and new investment in the communal land areas; and (4) expansion of services to communal area farmers.

GOZ's policies specific to agriculture were to:<sup>66</sup>

- Increase the relevancy of research to smallholders
- Increase the supply of trained agriculturalists needed to reach smallholders
- Improve the operating efficiency of the extension service
- Increase the availability of credit and inputs to smallholders
- Expand the member-controlled cooperative system
- Improve the effective use of land and water, and
- Develop an effective planning system able to cope with changing requirements

## **Findings**

### **Procedures**

#### **ZASA Working Group**

The useful policy dialogue and refinement role envisioned by ZASA designers has not been realized and neither GOZ nor the country as a whole has received the full benefit from the ZASA program that might have been possible if more attention had been paid to policy matters. While during early years the Working Group involved senior planners from both Finance and line ministries, membership has both become dominated by MFEPD and evolved to a membership of relatively junior staff who have not seen it their place to deal with the policy issues outlined in project documents.

As indicated in Table E.8.1, the Working Group has been largely dominated by MFEPD. Overall, MFEPD constitutes 32% of meeting participants, followed by 22% from MLARR, USAID with 12%, Education with 9% and Environment and National Parks

with 8%; participation by other Ministries is in the 1% to 4% range. No women are regular members. The Working Group is under the chairmanship of the donor assistance section of the Ministry, after some debate early in the life of the program as to whether it should fall under the jurisdiction of the ministry's planning arm. Overcoming initial resistance to its participation, USAID has been represented on the Working Group, normally by one or two representatives.

According to a sample of meeting minutes, technical ministries for the most part have attended Working Group meetings only when they had projects to present. Even then, some large ministry agencies, such as AGRITEX which is part of MLARR, were not invited to participate in meetings where major projects they had submitted, were being presented. Instead, junior ministry representatives were often responsible for presenting proposals to the Working Group, with which they were not very familiar.

**Table E.8.1**

**ZASA Working Group  
Participation by Ministries  
1983-1990**

	MFEPD Finance	MLARR Agric. AGRITEX	Mkg. Boards	ADA	MC	Coops	AFC	Water	Educ	Envr/ Parks	Other GCZ	USAID	Total
Total	117	81	8	3	10	12	2	14	33	30	7	45	362
%	32%	22%	2%	1%	3%	3%	1%	4%	9%	8%	2%	12%	100%

Source: Sample from minutes 45 ZASA Working Group meetings from 1983 through 1991, USAID, MFEPD

**Performance**

While it is true that ZASA funding for various projects did address most of the major policy objectives, policy-oriented research or monitoring, and evaluation which would have clarified the progress being made was largely absent. As can be seen from the following table, few resources were dedicated either to policy and planning (0.05% of local currency and 2% of US dollar allocations) or to the related area of monitoring and evaluation (0.02% of local currency and no US dollars). These minimal allocations are an indication of the low priority given by the ZASA Working Group to policy issues.

Although the project design clearly contemplated policy dialogue, the composition of the Working Group changed over time from a senior level policy analysis group to a more junior level project review and disbursement mechanism. In later years, some Working Group members saw no role whatsoever for the Working Group in policy analysis. This was confirmed by repeated statements of MFEPD staff assigned to work with the evaluation team that "ZASA had nothing to do with policy issues." Such issues, according to this interpretation, were decided at a much higher level of Government; the Working Group's sole role was in selecting activities to support among various alternative projects set before it.

A proposal was made in August 1984 to establish a ZASA secretariat within the donor section of MFEPD to act as a repository for matters to be treated by the Working Group and, in effect, to constitute its institutional memory. This proposal was not approved and no secretariat was established. A monitoring and evaluation unit was established, however, at MFEPD shortly before the evaluation team arrived in country.

This unit had had no time to do any substantial evaluation of projects by the end of 1990.

**Table E.8.2**

**Policy Planning:  
Allocations & Expenditure**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Conservation Strategy	MET	85	32,000		0
Soil Color Charts	MLARR	86/90		20,000	n/a
Parastatal Investment Proj.	MFEPD	87		127,000	n/a
Ag. Sector Assessment	MLARR/BRD	90		47,750	n/a
<b>Subtotal, Policy Planning</b>			<b>32,000</b>	<b>194,750</b>	<b>0</b>
<b>Percent of Total</b>			<b>0.05%</b> of tot. Z\$ alloc.	<b>1.6%</b> of US\$ alloc.	<b>0</b> of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

**Table E.8.3**

**Monitoring and Evaluation:  
Allocations & Expenditure**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
ZASA Evaluation Fund	MLARR/AGRITEX	86	2,500		0
ZASA Evaluation Fund	Coop. Dept.	88	3,000		2,625
ZASA Evaluation Fund	UZ/Agric	89	5,000		0
ZASA Evaluation Fund	UZ/Agric	90	3,050		0
<b>Subtotal, Monitoring/Evaluation</b>			<b>13,550</b>	<b>0</b>	<b>2,625</b>
<b>Percent of Total</b>			<b>0.02%</b> of tot. Z\$ alloc.	<b>0%</b> of US\$ alloc.	<b>19%</b> of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although all evaluation projects have been completed utilizing credits and thus do not yet appear as expended by MFEPD.

**Impact**

**Efficiency**

With regard to the efficiency of financial expenditure and reimbursement, policy, planning, and evaluation activities faced difficulties. By June 1990 none of the policy related activities and only 19% of the evaluation allocations, or a total of 6% of such allocations, were recorded by MFEPD as expended. While most activities have been completed using credits, reimbursements generally have been seriously delayed.

**Effectiveness**

While USAID has received required monitoring and evaluation reports within an acceptable time frame, the lack of adequate reporting on progress of individual sub-

projects projects has been a recurring theme in the minutes of Working Group meetings and was observed by the evaluation team. Reports were not forthcoming from relevant Ministries and there was no follow-up mechanism built into the Working Group for obtaining information on the progress of projects for which it had provided funding. The failure to establish a secretariat has impeded following-up with ministries on requested reports which have not been provided. It may also have impeded the flow of accounting information. The expenditure column in the preceding table (and in similar tables in other constraint area sections of this report) indicates that many ministries are very slow to report their expenditures to MFEPD.

Slow reporting causes problems with the vote of credit (VOC) system, discussed in detail in another section of this report, which requires justification of past expenditures before new expenditures can be approved. It should be noted that lack of up-to-date quantitative information on expenditures or achievements of ZASA-funded projects also constituted a serious impediment to the evaluation team in attempting to quantify project impacts. Beneficiary ministries for the most part were only able to provide the team only with qualitative information on the contribution that ZASA had made to their programs in support of small farmer development.

The Working Group, or small groups drawn from its members, have visited project sites occasionally for inspections, particularly where problems were thought to have occurred. The entire Working Group proposed visiting National Parks housing which did not seem to be appropriate in size and type; this request was not approved by USAID on the grounds that there was no need for the entire Group to visit the housing site. In other cases, projects have been visited by the entire Working Group or by individual members from the responsible ministries. While site inspections by appropriate Working Group members are not to be discouraged, there is no acceptable reason why routine monitoring and evaluation reports should not be readily available to the Working Group, GOZ, the donor, or evaluation missions.

This being said, a number of good evaluations of individual projects have been prepared, although their numbers are limited. The MLARR representative to the Working Group provided a relatively comprehensive narrative account of progress on its all its projects as of 1989. Another report by an MFEPD Working Group member effectively analyzed the problems encountered in the implementation of a Model D project near Bulawayo; however, the evaluation team in its visit to the project found no indication that these concerns had been addressed, particularly in view of the lack of sufficient ADA resources and the failure to develop mechanisms allowing adjacent communities to establish effective range management systems in their areas.

## **Conclusions**

- ZASA has supported innovative investments which GOZ departments, and more recently one NGO, for the most part would otherwise not have been able to make.
- The valuable experience from these innovative investments, however, has not been broadly shared, nor has it stimulated discussion of appropriate ways of achieving broad policy goals on which USAID and the GOZ agreed at the beginning of the project, and upon which they generally remain in agreement.
- The inter-ministerial working group model has proven to be a sound concept and should be a key feature of any future CIP-like projects.

- The ZASA Working Group, however, has not completely fulfilled its role in contributing significantly way to constructive policy dialogue and refinement within the framework of the program.

It is important to point out that agreement on policy goals does not preclude analysis of the means of reaching them. This is particularly true when there is good reason to believe that in some cases the design and implementation of some projects were not leading to the achievement of their objectives which, in general, were in line with original GOZ goals.

Daily the evaluation team discovered policy issues surrounding ZASA investments. The Working Group has been free to encounter the same issues, debate them, and address them with small, timely pilot projects and/or policy studies, most of which could have been funded using local currency and national consultants. If the Working Group had acted as investors, and watched over the investments made, the most illuminating and interesting part of the ZASA evaluation would have been examining this area of activity. As it is, ZASA funded only four policy related activities, one of which involved preparation of soil charts with little apparent policy relevance.

- Internal project reporting has been a problem from the start, impeding the ability of the Working Group to make decisions on new projects. Lack of good reports impeded the work of the evaluation team in determining project impacts.
- The decision not to set up a ZASA secretariat appears, ex post, to have been ill-advised and to have had a negative impact on reporting.

For example, the person presenting a request to the Working Group for funding for additional housing for National Parks was unable to explain what use had been made of previous ZASA funding or report even how many houses had been built. These gaps may be filled by the monitoring and evaluation unit recently established within the the planning section of MFEPD to oversee ZASA and other donor-funded programs. Setting up such a unit earlier, perhaps in conjunction with a ZASA secretariat, might have made a major contribution to ZASA's effectiveness and to that of other donor-funded projects.

- Zimbabwe is now engaged in a constructive and honest re-assessment of present policies, marked by candor, careful analysis of reality, and an expressed willingness to change to new models of development

This new openness bodes well for policy dialogue between the GOZ and USAID around any new program that commits substantial resources to development efforts; it deserves all possible and appropriate support.

## **Recommendations and Lessons Learned**

With remaining funds, it is recommended that ZASA:

1. Support government's commitment to re-examine its policies on trade and economic restructuring, focusing on issues raised by the innovative projects it has funded with local currency allocations and its allocations of CIP funds to private and public sector organizations. Of particular importance are projects which raise issues for which there is some chance of policy change within the next year or two. Among the issues such dialogue might address:

- Private sector investment supported by ZASA's CIP that may be impaired by the GOZ's decision to reduce tenure security for commercial farmers
- The impact of land tenure changes on overall agricultural production and food security, given that productivity on resettlement farms is generally lower than on functioning commercial farms
- Implications of rising malnutrition and falling real wages on agriculture
- Employment of school leavers in the agricultural sector

It is further recommended that new funds be made available through ZASA or a similar mechanism that include a clear role for ongoing policy dialogue and refinement. Specifically:

2. Establish a ZASA secretariat, with special responsibility for overseeing the reporting, monitoring, and evaluation of investments.

The decision not to have a secretariat to handle ZASA-related matters was an unfortunate one which has had serious implications for reporting and necessary follow-up. Any future project run by an inter-ministerial working group should have a secretariat.

3. Allocate resources to the recently established monitoring and evaluation section of MFEPD to provide its expertise for the oversight of existing and new projects.

This important new group should assist the Working Group and its secretariat to study, in particular, those activities given the largest resource allocations and those having policy implications related to issues raised by the economic liberalization being embarked upon by the GOZ.

4. Provide for broader membership of the Working Group, including:

- Technical ministries and departments
- Agricultural Parastatals
- Non-Government Organizations, including those representing communal, resettlement, and small-scale commercial farmers, and other agriculturally oriented NGOs
- Senior level women specifically representing the interests of female smallholders

5. Enable local NGOs to carry out some of the recommended research and evaluation tasks.

6. Evaluate future project activities with particularly attention to people-level impacts; provide for appropriate base-line surveys of prospective beneficiaries.

Generating data for an impact evaluation ex post, as has been necessary in this evaluation, is difficult and less accurate than if base-line data had been gathered initially. This is particularly true where reporting has been weak.

7. Provide resource that are adequate and concentrated, rather than stretched out over many years at lower funding levels.

With resource flows at the level of US\$10 million or more per year, working groups can constitute effective forums for policy dialogue. At lower levels of resource flows, such groups are likely to do little more than divide funds up among competing ministries.

8. Ensure that the Working Group has a greater role than it has had in reviewing the application of CIP funds, as well as local currency funds.

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Data Table 1

**Distribution of ZASA Funds by Ministry/Agency/Department**

Activity Sub-Project	Agency/ Ministry	Date Alloc.	Allocation Amount		Expenditure	
			Local Z\$	US\$	to 6/30/90-Z\$	%
<b>Ministry of Finance, Economic Planning &amp; Development</b>						
Parastatal Investment Proj.	MFEPD	87	0	127,000	n/a	
<b>TOTAL MFEPD</b>			0	127,000	0	
	Percent of Total		0%	1%	0%	
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	
<b>Ministry of Lands, Agriculture, and Rural Resettlement</b>						
<b>DR&amp;SS</b>						
Foot and Mouth Lab.	DR&SS	85	120,000		0	
Henderson Research Str.	DR&SS	85	76,500	217,056	76,500	
Animal Wastes Study	DR&SS	87	68,600		32,000	
Locust Control	DR&SS	87	300,000		4,836	
Plant Insp. Office Const.	DR&SS	90	60,000		n/a	
Heartwater Research	DR&SS	84/6	904,903	1,094,515	904,903	
Castor Bean Growth	DR&SS	86/90		28,303	n/a	
Soil Survey Equipmt	DR&SS	87/90		53,000	n/a	
Henderson Aquaculture#	DR&SS	85	36,590		5,027	
Small Farmer Research	DR&SS/MOE	85	107,800		57,000	
<b>SUBTOTAL DR&amp;SS</b>			1,674,393	1,392,874	1,080,268	
<b>Veterinary Service</b>						
Tsetse Control Camps	Vet. Service	85	600,000		0	
Dip Tanks	Vet. Service	85	1,151,000		492,031	
Vet. Toxology Unit	Vet. Service	89	5,000	250,000	6,000	
Vet. Toxology Reagents	Vet. Service	90	25,000		0	
<b>SUBTOTAL Vet. Service</b>			1,782,000	250,000	498,031	
<b>AGRITEX</b>						
Tawona Irrigation Scheme	AGRITEX	85	360,000		96,773	
Nenhowe/Nyanyadze Irrig.	AGRITEX	85	2,476,000		1,029,398	
T.O.T. Course	AGRITEX	87	19,340		0	
Communication Radios	AGRITEX	84/90	1,541,881	2,382,911	1,539,675	
Irrigation Support Fund	AGRITEX		2,000,000		0	
Irrigation Support Fund	AGRITEX/MLRRD	85	2,000,000		0	
ZASA Evaluation Fund	MLARR/AGRITEX	88	2500		0	
<b>SUBTOTAL AGRITEX</b>			8,399,721	2,382,911	2,665,846	
<b>MLARR/MLRRD/General</b>						
Rutenga Mapping	MLRRD	86	541,132	104,000	401,786	
Murimi Ulimi Magazine	MLARR	85	75,000		0	
Agric. Data Analysis	MLARR	86	30,000	100,000	19,582	
USDA Technical Exchange	MLARR	90	8,000		0	
Short Term Trng. Abroad	MLARR	84/86		900,000	n/a	
Soil Color Charts	MLARR	86/90		20,000	n/a	
Zambezi Valley Tillage	MLARR	85	100,000		0	
Inst. of Agric. Engineering	MLARR	90	1,876,000		0	
Ag. Sector Assessment	MLARR/BRD	90		47,750	n/a	
<b>Subtotal MLARR/MLRRD/General</b>			2,630,132	1,171,750	421,368	
<b>TOTAL MLARR/MLRRD, all Depts.</b>			14,486,246	5,197,535	4,665,511	
	Percent of Total		23%	43%	32%	
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	

# MFEPD shows an allocation of Z\$37,000 which does not appear on USAID records

## ANNEX 1

**Data Table 1, (continued)**  
**Distribution of ZASA Funds by Ministry/Agency/Department**

Activity Sub-Project	Agency/ Ministry	Date Alloc.	Allocation Amount		Expenditure	
			Local Z\$	US\$	to 6/30/90-Z\$	%
<b>Agriculture Development Authority</b>						
Ranch Scheme (Model D)	ADA	84	500,000		353,957	
Jojoba Feasibility	ADA	86		76,900	n/a	
Microfiche Libraries	ADA	85/8		12,600	n/a	
<b>TOTAL ADA</b>			<b>500,000</b>	<b>89,500</b>	<b>353,957</b>	
	Percent of Total		23%	43%	71%	
			of tot.Z\$ alloc.	of tot.US\$ alloc.	of Z\$ allocated	
<b>Parastatals/Marketing Boards/Producers Associations</b>						
Coffee Storage (Chipenge)	Grain Mktg. Bd	85	200,000		200,000	
GMB Inspan Sheds	GMB	85	225,000		885	
GMB Rural Depots (I)	GMB	85	1,600,000		1,600,000	
GMB Stackers	GMB	85	240,000		231,689	
Mutare Bag Depot	GMB	85	1,350,000		1,350,000	
Norton Bag Depot	GMB	87		77,000	n/a	
Tractors	GMB	87		48,000	n/a	
Forklift Trucks	GMB	90		29,250	n/a	
Cleveland Dam G'nut Dep.	GMB	87/8	1,950,000		1,483,811	
Coffee Processing Equip.	GMB	87/8	6,700,000		6,700,000	
GMB Rural Depots (II)	GMB	88/90	2,000,000		0	
Mahuwe Multipurp. Depot	GMB/CMB	85	470,600		449,977	
Forklift Trucks	Cotton Mktg. Bd	86/7		491,418	n/a	
Suswe Prim'y Mktg. Depot	CMB	88/90	750,000		0	
Kadoma Cotton Trng. Ctr.#	MLARR/CMB	87/90	1,818,399		498,298	
Milk Distribution Trucks	Dairy Mktg. Bd.	86	2,050,000		2,012,358	
Milk Distribution##	DMB	87/90	3,200,000		0	
Pig Production Trng. Ctr.	Pig Industry Bd	85/7	200,000		0	
<b>Sub-total, GMB</b>			<b>7,600,300</b>	<b>154,250</b>	<b>4,891,374</b>	
<b>Sub-total, GMB/Coffee</b>			<b>6,900,000</b>	<b>0</b>	<b>6,900,000</b>	
<b>Sub-total, CMB</b>			<b>2,803,699</b>	<b>491,418</b>	<b>224,989</b>	
<b>Sub-total, DMB</b>			<b>5,250,000</b>	<b>0</b>	<b>2,012,358</b>	
<b>Sub-total, Other/PIB</b>			<b>200,000</b>	<b>0</b>	<b>0</b>	
<b>TOTAL Parastatal Mktg. Bds.</b>			<b>22,753,999</b>	<b>645,668</b>	<b>14,028,720</b>	
	Percent of Total		37%	5%	62%	
			of tot.Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	
* MFEPD shows allocation of Z\$572,500; USAID shows allocation of Z\$1.8 million						
## Allocated on USAID records but does not appear on MFEPD records						
<b>Forestry Commission</b>						
Forestry Comm'n. Equip.	Forestry Comm.	84	150,000		0	
Forestry Research	Forestry Comm.	86	158,000		0	
Mgt. of Indigenous Forests	Forestry Cm.	86/90	200,000	101,001	0	
<b>TOTAL Forestry Comm.</b>			<b>508,000</b>	<b>101,001</b>	<b>0</b>	
	Percent of Total		1%	1%	0%	
			of tot.Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	

## ANNEX 1

Data Table 1, (continued)  
Distribution of ZASA Funds by Ministry/Agency/Department

Activity Sub-Project	Agency/ Ministry	Date Alloc.	Allocation Amount		Expenditure	
			Local Z\$	US\$	to 6/30/90-Z\$	%
<b>Department of Cooperatives &amp; Agriculture Finance Corp.</b>						
Kapenta Fishing Coops	Coop Dept	86	180,000			0
KMC Fishing Coops	Coop Dept	89	237,258			237,258
Farmers Coop. Training	Coop Dept	85/7	550,000			446,777
Coop. No. 2 Acct'g. Audit	Coop. Dept.	86	200,000			186,000
ZASA Evaluation Fund	Coop. Dept.	88	3,000			2,625
Coop Marketing & Supply	Coop. Dept.	na	2,000			2,000
Cooperative Credit	Ag.Fin.Corp./ Coops.	85	2,000,000			2,000,000
AFC Internal Audit	Ag. Fin. Corp.	86	44,000	13,500		na
Subtotal, Dept. of Coops			1,172,258	0		874,660
Subtotal AFC			2,044,000	13,500		2,000,000
<b>TOTAL Dept. of Coops &amp; AFC</b>			<b>3,216,258</b>	<b>13,500</b>		<b>2,874,660</b>
	Percent of Total		5%	0%		89%
			of tot.Z\$ alloc.	of US\$ alloc.		of Z\$ allocated
<b>University of Zimbabwe, Faculty of Agriculture, Agricultural Colleges, &amp; NGOs.</b>						
ZASA Evaluation Fund	UZ/Agric	89	5,000			0
ZASA Evaluation Fund	UZ/Agric	90	3,050			0
Irrigation Devt. (Farm)	UZ/Agric.	85	205,000			205,000
Higher Education	UZ/Agric.	83/90	7,702,987	5,054,244		7,137,373
Higher Education#	UZ/Agric.	84/90	607,000			0
Ag. College Expansion	Gwebi College	86	2,250,000			0
Ag. College Expansion	Chibero College	86	1,550,000			947,740
Ag. College Irrig. Devt.	Chibero College	86	65,000			47,360
Ag. College Furniture**	Chibero College	86	45,000			34,627
Wensleydale Farm Trng.	MLA/IR/Africare	90	1,490,147			0
Subtotal, Univ. of Zimbabwe			8,523,037	5,054,244		7,342,373
Subtotal, Agric. Colleges			3,910,000	0		1,029,727
Subtotal NGOs other			1,490,147	0		0
<b>TOTAL UZ: Colleges: NGOs</b>			<b>13,923,184</b>	<b>5,054,244</b>		<b>8,372,100</b>
	Percent of Total		22%	42%		60%
			of tot.Z\$ alloc.	of US\$ alloc.		of Z\$ allocated
# Allocated on USAID records but does not appear on MFEPD records						
** Allocated by MFEPD with USAID approval but does not appear on AID records						
<b>Ministry of Environment &amp; Tourism</b>						
Communication Radios	MET	86		190,883		na
Natural Resource (Hard)	MET	84/7	275,000	540,670		90,395
Extension Educ. (Soft)	MET	84/90	1,139,800			41,247
& Monitoring (Soft)	MET	86	215,000	134,400		17,860
Conservation Strategy	MET	85	32,000			0
Zambezi Anti-Poaching	MET	86	577,047			0
Wildlife Symposium	MET	87	20,000			0
National Parks Housing	MET	88	4,000,000			0
<b>TOTAL MET</b>			<b>6,258,847</b>	<b>865,953</b>		<b>149,502</b>
	Percent of Total		10%	7%		2%
			of tot.Z\$ alloc.	of US\$ alloc.		of Z\$ allocated

## ANNEX 1

Data Table 1, (continued)  
Distribution of ZASA Funds by Ministry/Agency/Department

Activity Sub-Project	Agency/ Ministry	Date Alloc.	Allocation Amount		Expenditure	
			Local Z\$	US\$	to 6/30/90-Z\$	%
Ministry of Energy and Water Resources Development						
Open Wells Test	MEWRD	84	100,000		99,212	
Underground Water	MEWRD	84	400,000		400,000	
Chipenge Water Augment'n	MEWRD	87/90			35,000	n/a
TOTAL, MEWRD			500,000	35,000	499,212	
	Percent of Total		0.8%	0.3%	99.8%	
			of tot.Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	

Summary of Allocations and Expenditures		Allocation Amount			
Ministry Z\$	Agency/Dept. %		Local Z\$	US\$ to 6/30/90-	
MEEDP		0	127,000	0	0%
MLARR/MLRRD	DR&SS	1,674,393	1,392,874	1,080,266	65%
	Vet. Service	1,782,000	250,000	498,031	28%
	AGRITEX	8,399,721	2,382,911	2,665,846	32%
	MLARR/General	2,630,132	1,171,750	421,368	16%
Subtotal MLARR		14,486,246	5,197,535	4,665,511	32%
ADA		500,000	89,500	353,957	71%
Parastatal Mktg. Bds.	GMB	7,600,300	154,250	4,891,374	64%
	GMB/Coffee	6,900,000	0	6,900,000	100%
	CMB	2,803,699	491,418	224,989	8%
	DMB	5,250,000	0	2,012,358	38%
	Other/PIB	200,000	0	0	0%
Subtotal Parastatal Mktg. Bds.			22,753,999	645,668	
	14,028,720	62%			
Forestry Comm.		508,000	101,001	0	0%
Dept. of Coops & AFC	Dept. of Coops	1,172,258	0	874,660	75%
	AFC	2,044,000	13,500	2,000,000	98%
Subtotal Dept. of Coops & AFC			3,216,258	13,500	2,874,660
	89%				
U/Z; Colleges; NGOs	Univ. of Zimbabwe	8,523,037	5,054,244	7,342,373	86%
	Agric. Colleges	3,910,000	0	1,029,727	26%
	Training/ther	1,490,147	0	0	0%
Subtotal U/Z; Colleges; NGOs		13,923,184	5,054,244	8,372,100	60%
MET		6,258,847	865,953	149,502	2%
MEWRD		500,000	35,000	499,212	100%
TOTAL, ALL MINISTRIES & DEPARTMENTS		62,146,534	12,129,401	30,943,662	50%
	Percent of Total	100%	100%	50%	
		of tot.Z\$ alloc.	of US\$ alloc.	of Z\$ allocated	

## Distribution of ZASA Funds by Constraint Area

Agriculture  
Research

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Heartwater Research	DR&SS	84/6	904,903	1,094,515	904,903
Foot and Mouth Lab.	DR&SS	85	120,000		0
Henderson Research Str.	DR&SS	85	76,500	217,056	76,500
Small Farmer Research	DR&SS/MOE	85	107,800		57,000
Castor Bean Growth*	DR&SS	86/90		28,303	n/a
Animal Wastes Study	DR&SS	87	68,600		32,000
Locust Control	DR&SS	87	300,000		4,836
Plant Insp. Office Const.	DR&SS	90	60,000		n/a
Dip Tanks	Vet. Service	85	1,151,000		492,031
Tsetse Control Camps	Vet. Service	85	600,000		0
Vet. Toxology Unit	Vet. Service	89	6,000	250,000	6,000
Vet. Toxology Reagents	Vet. Service	90	25,000		0
Agric. Data Analysis	MLARR	86	30,000	100,000	19,582
USDA Technical Exchange	MLARR	90	8,000		0
Microfiche Libraries	ADA	85/6		12,600	n/a
Forestry Research	Forestry Comm.	86	158,000		0
Henderson Aquaculture#	DR&SS	85	36,500		5,027
<b>Subtotal, Ag. Research</b>			<b>3,652,393</b>	<b>1,702,474</b>	<b>1,597,879</b>
Percent of Total			6%	14%	44%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\* MFEPD shows a US\$28,303 allocation while DRSS reports US\$32,500 of which \$27,752 had been spent by 1989; the balance was reported as probably not being used.

# MFEPD shows an allocation which does not appear on USAID records.

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

Agriculture Extension  
(Incl. National Parks  
& Fishing Coops)

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Communication Radios	AGRITEX	84/90	1,541,881	2,382,911	1,539,675
Murimi Ulimi Magazine	MLARR	85	75,000		0
Jjoba Feasibility	ADA	85		76,900	n/a
Kapenta Fishing Coops	Coop Dept	85	180,000		0
KMC Fishing Coops	Coop Dept	89	237,258		237,258
Communication Radios	MET	86		190,883	n/a
Zambezi Anti-Poaching	MET	86	577,047		0
National Parks Housing	MET	88	4,000,000		0
<b>Subtotal, Extension</b>			<b>6,611,186</b>	<b>2,650,694</b>	<b>1,776,933</b>
Percent of Total			11%	22%	27%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

**Agriculture  
Credit**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Cooperative Credit	Coop Dept./AFC	85	2,000,000		2,000,000
AFC Internal Audit	Agric. Finance Corp.	86		44,000	13,500 n/a
<b>Subtotal Ag. Credit</b>			<b>2,044,000</b>	<b>13,500</b>	<b>2,000,000</b>
<b>Percent of Total</b>			<b>3%</b> of tot. Z\$ alloc.	<b>0.1%</b> of US\$ alloc.	<b>98%</b> of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

**Marketing and  
Input Supply**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Coffee Storage (Chipenge)	GMB/Coffee	85	200,000		200,000
Coffee Processing Equip.	GMB/Coffee	87/8	6,700,000		6,700,000
GMB Inspan Sheds	GMB	85	225,000		885
GMB Rural Depots (I)	GMB	85	1,600,000		1,600,000
GMB Stackers	GMB	85	240,000		231,589
Mutare Bag Depot	GMB	85	1,350,000		1,350,000
Norton Bag Depot	GMB	87		77,000	n/a
Tractors	GMB	87		48,000	n/a
Cleveland Dam G'nut Dep.	GMB	87/8	1,950,000		1,483,811
GMB Rural Depots (II)	GMB	88/90	2,000,000		0
Forklift Trucks	GMB	90		29,250	n/a
Mahuwe Multip. Depot	GMB/CMB	85	470,600		449,977
Forklift Trucks	Cotton Mktg. Bd	86/7		491,418	n/a
Suswe Prim'y. Mktg. Depot	CMB	88/90	750,000		0
Milk Distribution Trucks	Dairy Mktg. Bd.	86	2,050,000		2,012,358
Milk Distribution#	DMB	87/90	3,200,000		0
Coop. No. 2 Acct'g. Audit	Coop. Dept.	86	200,000		186,000
Coop Marketing & Supply	Coop. Dept.	na	2,000		2,000
<b>Subtotal Marketing and Inputs</b>			<b>20,937,600</b>	<b>645,668</b>	<b>14,216,720</b>
<b>Percent of Total</b>			<b>34%</b> of tot. Z\$ alloc.	<b>5%</b> of US\$ alloc.	<b>68%</b> of Z\$ allocated**

Source: USAID, MFEPD, November 1990

# Allocated on USAID records but does not appear on MFEPD records

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

**Land and Water Use**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Soil Survey Equip	DR&SS	87/90		53,000	n/a
Irrigation Support Fund	AGRITEX/MLRRD	85	2,000,000		0
Nenhowe/Nyanyadze Irrig.	AGRITEX	85	2,476,000		1,029,398
Tawona Irrigation Scheme	AGRITEX	85	360,000		96,773
Irrigation Support Fund	AGRITEX	na	2,000,000		0
Rutenga Mapping	MLRRD	86	541,132	104,000	401,786
Zambezi Valley Tillage	MLARR	85	100,000		0
Ranch Scheme (Model D)	ADA	84	500,000		353,957
Forestry Comm'n. Equip't	Forestry Comm.	84	150,000		0
Mgt. of Indigenous Forests	Forestry Comm.	86/90	200,000	101,001	0
Irrigation Dv't. (Farm)	UZ/Agric.	85	205,000		205,000
Natural Resource (Hard)	MET	84/7	275,000	540,670	90,395
Extension Educ. (Soft)	MET	84/90	1,139,800		41,247
& Monitoring (Soft)	MET	86	25,000	134,400	17,860
Wildlife Symposium	MET	87	20,000		0
Open Wells Test	MEWRD	84	100,000		99,212
Underground Water	MEWRD	84	400,000		400,000
Chipenge Water Augment'n	MEWRD	87/90		35,000	n/a
<b>Subtotal Land &amp; Water Use</b>			<b>10,681,932</b>	<b>968,071</b>	<b>2,735,628</b>
Percent of Total			17%	8%	26%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEED, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEED records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEED.

**Human Resource Training**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
T.O.T. Course	AGRITEX	87	19,340		0
Short Term Trng. Abroad	MLARR	84/86		900,000	n/a
Kadoma Cotton Trng. Ctr. #	MLARR	87/90	1,818,399		498,298
Wensleydale Farm Trng.	MLARR	90	1,490,147		0
Pig Production Trng. Ctr.	Pig Industry Bd.	85/7	200,000		0
Farmers Coop. Training	Coop Dept	85/7	550,000		446,777
Higher Education	UZ/Agric.	83/90	7,702,987	5,054,244	7,137,373
Higher Education ##	UZ/Agric.	84/90	607,000		0
Ag. College Expansion	Gwebi College	86	2,250,000		0
Ag. College Expansion	Chibero College	86	1,550,000		947,740
Ag. College Irrig. Devt.	Chibero College	86	65,000		47,360
Ag. College Furniture *	Chibero College	86	45,000		34,627
Inst. of Agric. Engineering	MLARR	90	1,876,000		0
<b>Subtotal Human Resources/Education</b>			<b>18,173,873</b>	<b>5,954,244</b>	<b>9,112,175</b>
Percent of Total			29%	49%	50%
			of tot. Z\$ alloc.	of US\$ alloc.	of Z\$ allocated**

Source: USAID, MFEED, November 1990

# MFEED shows allocation of Z\$572,500; USAID shows allocation of Z\$1.8 million

## Allocated on USAID records but does not appear on MFEED records

\* Allocated by MFEED with USAID approval but does not appear on AID records

\*\* Represents percent of allocated funds that appear as expended on MFEED records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEED.

**Policy Planning**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
Conservation Strategy	MET	85	32,000		0
Soil Color Charts	MLARR	86/90		20,000	n/a
Parastatal Investment Proj.	MFEPD	87		127,000	n/a
Ag. Sector Assessment	MLARR/BRD	90		47,750	n/a
Subtotal Policy Planning			32,000	194,750	0
Percent of Total			0.05% of tot. Z\$ alloc.	1.6% of US\$ alloc.	0 of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

**Monitoring and Evaluation**

Activity Sub-Project	Agency/ Ministry	Year Alloc.	Allocation Amount		Expenditure to 6/30/90-Z\$
			Local Z\$	US\$	
ZASA Evaluation Fund	MLARR/AGRITEX	86	2,500		0
ZASA Evaluation Fund	Coop. Dept.	88	3,000		2,625
ZASA Evaluation Fund	UZ/Agric	89	5,000		0
ZASA Evaluation Fund	UZ/Agric	90	3,050		0
Subtotal Monitoring/Evaluation			13,550	0	2,625
Percent of Total			0.02% of tot. Z\$ alloc.	0% of US\$ alloc.	19% of Z\$ allocated**

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records.

**TOTAL ZASA LOCAL CURRENCY ALLOCATIONS AND EXPENDITURES**

		Allocation Amount		Expenditure to 6/30/90-Z\$
		Local Z\$	US\$	
TOTAL		62,146,534	12,129,401	31,441,960
(Calculated at current exchange rates-11/90)	Total in Z\$	62,146,534	30,323,503	31,441,960
	Total in US\$	24,858,614	12,129,401	12,596,784
Total, Local + US\$, in US\$	\$36,988,015	Percent expended		51%**
Total, Local + US\$, in Z\$	Z\$92,470,037	of total Z\$ allocation:		
No. of Subprojects	84	Average Amount	1,100,834	440,334
No. of Agencies/Depts.	18	Average Amount	5,137,224	2,054,890

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

**Summary of ZASA Local Currency & US\$  
Allocations & Expenditures by  
Constraint Area**

Constraint Area	Allocation Amount				Expenditure	
	Local Z\$	%	US\$	%	to 6/30/90-Z\$	%**
Agricultural Research	3,652,393	6%	1,702,474	14%	1,597,879	44%
Agricultural Extension	6,611,186	11%	2,650,694	22%	1,776,933	27%
Agricultural Credit	2,044,000	3%	13,500	0.1%	2,000,000	98%
Marketing and Input Supply	20,937,600	34%	645,668	5%	14,216,720	68%
Land & Water Use	10,681,932	17%	968,071	8%	2,735,628	26%
Human Resources, Ed./Training	18,173,873	29%	5,954,244	49%	9,112,175	50%
Policy Planning	32,000	0.05%	194,750	1.6%	0	0
Monitoring/Evaluation	13,550	0.02%	0	0	2,625	19%
<b>TOTAL</b>	<b>62,146,534</b>	<b>100%</b>	<b>12,129,401</b>	<b>100%</b>	<b>31,441,960</b>	<b>100%</b>

Source: USAID, MFEPD, November 1990

\*\* Represents percent of allocated funds that appear as expended on MFEPD records, although some projects may have been completed utilizing credits and thus not yet appear as expended by MFEPD.

## **ANNEX 3**

### **The Recurrent Implications of ZASA Funding**

The original ZASA document correctly raised the issue of investments that would have recurrent cost implications that may be beyond the capacity of the Government of Zimbabwe to sustain. This is a correct and regular donor worry. In the 1986 evaluation the issue of recurrent costs was raised in relation to the three formal components of agricultural training funded by ZASA: the University of Zimbabwe Faculty of Agriculture, and the agricultural colleges, namely Gwebi and Chibero.

The real expenditure per pupil throughout the educational and training system in Zimbabwe has declined quite markedly since Independence. This is in part the result of falling real wages for staff, but, more significantly, it is compounded by the increase in student numbers. Elsewhere in this report are the figures which show the decline in the real expenditure per student at Gwebi Agricultural College. It should be noted that Gwebi was an all white college and therefore many of the services and expenses initially were easily pruned without affecting efficiency. Once that had been achieved, so Gwebi operated at the same level as Chibero, both colleges' real expenditure per student continued to decline. The figures are now close to half of the real expenditure per student in 1980.

The above would suggest that the concern for the recurrent cost implications is correct and that there is ample evidence to suggest that Government has not been able to maintain the recurrent expenditure of the colleges as they have expanded. There is another view to this that should be reported. ZASA endowed the University with a large commercial farm, much of which was separated from student and research activities and put under the management of a Farm Manager.

That farm is run commercially. The intention was to provide the University with a farm on which they could conduct research trials and involved students in practical work. The balance of the farm is an endowment to the Faculty of Agriculture. The farm has been realising annual profits on its operations but is still repaying the University for a working capital loan that it made when the farm was transferred in 1982/83. Once that loan is repaid to the University it should be incumbent upon the Working Group and USAID to establish that in fact dividends from the farm will go to the Faculty of Agriculture. That should ease considerably some of the recurrent cost concerns so long as the additional revenue from the farm is used to enhance the working ability of the Faculty and not just to relieve the University and, indirectly, Government of their responsibilities.

The position of Chibero and Gwebi is different. Both colleges are facing serious constraints to their normal teaching operations, particularly on the practical work side. Both colleges over the years have enjoyed the use of quite large tracts of good land. To take the case of Chibero. It has for years run a large and successful dairy operation of over 120 cows. Indeed ZASA has funded a new dairy with the latest and best equipment. It has also run a 30 hectare Virginia tobacco crop on its land and through its barns. These two have been dynamic activities on the college farm. Alongside these there have been other activities such as general livestock and the production of maize and other crops. In recent years, and similarly with activities at Gwebi College,

the revenues from farm activities have been deposited with the Treasury. In turn the Treasury has made annual allocations through the Ministry of Agriculture to the Colleges for their running costs. These include salaries and direct costs related to students, and they also include farm activities. However, Government does not take account of the revenue generated on the College farms and over the years has cut back its funding of costs for farm operations. Today at Chibero there are seven cows that cannot warrant the new dairy and could easily have been accommodated in the old dairy that still stands nearby and could be made operational quickly. The tobacco crop has been reduced over recent years till today it is a mere 3 hectares. The story is repeated for maize. ZASA funded a large maize drying unit, useful for student work but with a capacity beyond that needed for training. The college crop of old alone could justify it. The facility today stands idle.

The story at Gwebi parallels that at Chibero. Gwebi has some of the best soils in the country. The College, however, can no longer utilise all but a tiny fraction of that land.

During short visits to both Colleges the Evaluation Team shared a sense of despair amongst faculty. It appears that the Ministry of Agriculture is also concerned at what has happened to the Colleges. There are three solutions under discussion. The first is a proposal made earlier by the Colleges that they become affiliate Colleges of the University. This would not so much handle the financial problems, but rather would "synchronise" the curriculum of the Colleges and the University and perhaps act to protect the Colleges by having a closer relationship to the University. A second solution is now under discussion in the Ministry. It addresses more directly the financial question of colleges and their agricultural resources. This takes the form of a revolving fund concept which would finance the College operations on their farms. The Evaluation Team understood this was at the early stage of discussion and no details were available. It does attempt to separate the financing of the Colleges as teaching institutions by Government, and the Colleges operation agricultural farms which can act as endowments for the Colleges. A third concept that the Team would like to propose is that all faculty and all students participate financially in the working of the College farms. There is no need to deal with this at length. However, the philosophy that lends itself best is that of Trusts that control the farms and that faculty and students become employee owners in relation to the respective College Trusts. The invitation to faculty and students would be to invest in the farm, as with the concept of job ownership in employee owned companies. As the faculty who would be there for some period of time, they would invest in cash, but via loans from the Trusts with repayments through dividends held back. This builds an equity stake. Students would commit themselves to work for a certain period each year. This would reorient the College towards farm management and operations and away from purely academic involvement. Faculty with whom this idea was discussed responded immediately by suggesting that the College syllabus be extended to three years rather than two, including as an additional year the first year spent on a commercial farm. This would produce a more mature student with far more practical experience which would make him or her more marketable to the commercial agricultural sector, both on-farm and in services to agriculture.

## **ANNEX 4**

### **The Functioning of the ZASA Working Group**

The most innovative part of ZASA, that separates it from other CIP programmes, was that it focused on a sector, namely agriculture, with a special emphasis on local currency funding for small farmer production, that it accepted government's policy prescriptions soon after Independence, and backed them by allowing an Interministerial Working Group to allocate the funds.

The first meetings of the ZASA Working Group have been reported as creating a fair degree of excitement. The fact that representatives across ministries but also operational agencies and field services in Government and the University were to meet regularly with the serious responsibility of discharging decisions around the financing of agricultural investments was novel. It offered the means and the purposes to form a club; an influential if somewhat informal grouping.

Otherwise decisions are made essentially behind closed doors, with the concerned Ministry representing a distant field agency not always aware why a certain decision is made in MFEPD.

Much of the first meetings of the ZASA Working Group was given to setting up the system and reaching a sense of common values amongst the group as to what ZASA would look for, what it would entertain, and how it would monitor and follow up original investment. A second area concerned the role of USAID.

The Working Group is a unique institution within Government since it brings to bear a number of areas of knowledge and experience as well as responsibility. The ZASA constraint areas included an area on policy work and research which armed the Working Group with a fund that it itself could draw upon but which obviously could also be used to fund research proposals from outside the Group. As a Group looking at investment proposals it was also expected that through the monitoring of the implementation of investment and by Group members visiting institutions and agencies benefited, the Working Group would be able to husband those investments in terms of implementation but also by pushing into areas of policy and of follow-up investments so that the original investment ideas may be made more attractive.

In the first meetings of the Working Group there was some expectation that the successful use of the ZASA counterpart funds along with the matching foreign exchange might lead to a second ZASA programme. In other words the first three years were a trial period for the effectiveness of the Working Group albeit that the programme was expected to last six years. Part of the task therefore was to find and/or develop, if not forthcoming, worthwhile investments that assisted the small farm sector. Part of the understanding was that ZASA was expected to demonstrate the rapidity with which Government could allocate funds for new additional investments beyond what Government was capable of funding itself and use the flexibility of the mechanisms provided to disburse funds quickly and thereby to see implementation proceed expeditiously.

At first the ZASA Working Party was chaired from the Department of both in MFEPD which managed the PSIP - the planners. Quite early on the lead was switched to the Department in MFEPD that deals with donors. This appears to have been a major mistake and one in contradiction of the promise that the Working Group would first look at the global and particular requirements and opportunities for small farmer development, and then decide on ZASA funding.

Officials who attended ZASA meetings reported that they were not regularly invited - once they had been to the Working Group to defend a submission they were given to feel that they could not expect a second round of funding, and so fell away. From 1984 the list of members changes in two directions: towards junior staff and towards a smaller group of Ministry officials whose normal work was to process projects for donor funding. Real experts who could raise the debate above funding allocation fell away. This disappointment was strongly registered in ZASA minutes of December, 1988, but appears much earlier in minutes in 1983 and 1984.

With the declining authority and range of representation in the Working Group, officials argued that certain projects received special attention prior to meetings, thereby underwriting the democratic nature of the Working Group. An insider/outsider dimension appears to have crept in in line with the return to conventional processing.

The University for instance, a rich repository of knowledge on small farmers issues, has not been invited to ZASA meetings for over two years. At one ZASA meeting convened to meet the evaluation team, the discussion was with only three members out of fourteen present. Seven were from MFEPD, two from MLARR, one from the Ministry of Higher Education, one from National Parks, and three from the Ministry of Cooperative and Community Development. Apart from the Chairman, an Under-Secretary, all were junior staff. The three from Coops were there to defend a funding request. The only woman in the group was there only as a member of the group that had come to defend its request for funds. What was most notable about the exercise is that the AFC, which had managed the first such ZASA grant to the Cooperative Unions over the past five years, was not invited. It alone had the knowledge upon which to judge the proposal. Instead the Cooperative Department appeared before an inner court with little or no institutional memory and limited to junior administrative officials, however good, whose task was to process funding.

The accusation that Ministries and agencies were not "committed" to ZASA meetings cannot count for much. The evidence is that Government denied the ZASA Working Group its dynamic role early on. This decision in MFEPD is in keeping with that Ministry's wish to avoid commitment to ideas and projects, preferring instead the case of being the final financial orbiter. This procedure sits uneasily with the Ministry's second and newer function, Economic Planning and Development. The high turnover of and increasingly junior staffing has also hampered that role.

A proposal was made in August 1984 to establish a ZASA secretariat within the donor section of MFEPD to act as a repository for matters to be treated by the Working Group and, in effect, to constitute its institutional memory. This proposal was not approved and no secretariat was established. A monitoring and evaluation unit was established, however, at MFEPD shortly before the evaluation team arrived in country.

This unit had had no time to do any substantial evaluation of projects by the end of 1990.

It appears that the hiatus in the USAID programme in Zimbabwe from 1985 also impaired the functioning of the Working Group. It meant a cessation of new funds and, when re-established in 1988, provided far smaller funds than had existed in the beginning. This must have contributed to the clear decline in the seniority of persons attending the Working Group. Another factor which may have contributed to the decline in the seniority of ZASA's Working Group members may have been the sense that ZASA itself was coming to an end. In one of the interim evaluation reports, 1986, it was recommended that ZASA devote the balance of the funds available to consolidating existing investments.

Had the ZASA programme been completed within the six year period, and had an expectation of a follow-up programme existed, it may well have maintained the early momentum within the Working Group. It, for instance, may have produced a more limited variety of investments but with a clear growing portfolio of successor investments to the original grantees. As the Group explored the issues around small farmer agriculture one would have expected to see a new category of investments arising which was typified by small experimental investments, perhaps preceded by research programmes, which sought to unravel policy and programme issues so that either ZASA or Government itself could put in bigger money in the second phase. There is little sense that either of the two activities, successor investments, and seed money towards unravelling more worthwhile and larger investments, took place.

Some of the beneficiaries of the ZASA Working Group decisions reported that there was a sense that money was to be distributed widely and that it would be difficult to come back to ZASA for a second or third round of investment. This is not entirely supported by the evidence. ZASA has supported a number of investments more than once. A case in point is agricultural research. Here the lubrication from one grant to another may well have been the good relationship that existed between the DR&SS and the Agricultural Officer in USAID. On the other hand it is also clear that civil servants recognised the importance of agricultural research and sought within the limitations imposed by Treasury to maintain the agricultural research effort at as high a level as they could engineer.

The original ZASA document lists six policy areas where policy reform was felt to be critical to progress. These are as follows:

- (1) Government allocation of a greater share of budgetary, human, and institutional resources to programs directed toward smallholder needs, without unduly increasing recurrent costs;
- (2) Implementing agencies' demonstrated capabilities and actual progress in implementation of agricultural sector programs;
- (3) Progress of the Interministerial ZASA Working Group and its ability to coordinate project development, monitoring and implementation, in the context of established GOZ procedures;
- (4) The specific contribution made by ZASA-funded projects to meeting resource gaps in the constraint areas;

- (5) Progress of developing, refining and implementing agricultural policies (including subsidy reduction) which promote sectoral growth, smallholder on-farm income and smallholder market participation;
- (6) Progressively greater involvement of private firms in providing goods, services and support to smallholder farmers, and evidence of steps taken by government to create a more favourable climate for such private participation.

Included in the evaluation of 1986 was a search for "evidence of progress in areas of policy reform". This went beyond the original ZASA terms, shown above:

- a. Allocation of a greater share of total GOZ resources to programs which beneficially affect low income smallholders;
- b. Reduction and eventual elimination of consumer subsidies resulting from fixed producer and consumer prices;
- c. A land resettlement policy which recognizes availability, competing smallholder assistance requirements, and production export goals;
- d. Application of commercial rates of interest in lending to smallholders;
- e. An increase in research on crops and integrated crop/livestock systems directed specifically to traditional/small farm conditions;
- f. Extension of price stimuli, now applied to major commercial crops, to some present and new small farm crops;
- g. Employment of market news and other innovative measures to extend technical information on production and marketing to smallholders, thus serving a large number of farmers with the number of available extension workers;
- h. Adequate government support of rural savings clubs as a mechanism for mobilizing rural savings for smallholder credit and for channeling loan funds at lower costs through groups to small-scale farmers;
- i. Development and adoption of measures to increase cooperation and linkages between research, extension, and university education, and
- j. Reduction of the costs of essential inputs by substituting lower cost items and more efficient methods of use, thereby easing the elimination of subsidies.

The importance of this criteria for evaluation is supported by the considerable attention it received in the 1986 evaluation report.

The considerably lengthened life of the first ZASA programme, from 1982 to 1990, rather than a quickly dispersing programme over three to six years, appears to have given rise to the newer perceptions of donor, not just of USAID, by 1986, and the emphasis on policy reform.

There is little evidence that the Working Group was conscious of this set of criteria for evaluation. It was not part of any original contingent clause in the annual renewal of ZASA funds. The evidence, rather, is that this component has received the attention of USAID officials almost exclusively and thereby has served as a distant background to the working of ZASA within Government. That it was not built into the terms and the structures and staff membership of the ZASA Working Group is an oversight that would have been apparent by 1984 and should have formed the basis of renewed funding.

If the weaknesses surrounding the ZASA Working Group were corrected, a matter of both substance but equally style, and in conformity with the new opportunities within Government to discuss policy issues, then the Working Group, or its successor, could well play a dynamic and valuable role in assessing the needs of and supporting small farmer development.

## **Conclusions**

- The valuable experience from ZASA's innovative investments has not been broadly shared, nor has it stimulated discussion of appropriate ways of achieving broad policy goals on which USAID and the GOZ agreed at the beginning of the project, and upon which they generally remain in agreement.
- The inter-ministerial working group model has proven to be a sound concept and should be a key feature of any future CIP-like projects.
- The ZASA Working Group, however, has not completely fulfilled its role in contributing significantly way to constructive policy dialogue and refinement within the framework of the program.
- The decision not to set up a ZASA secretariat appears, ex post, to have been ill-advised and to have had a negative impact on reporting.
- Zimbabwe is now engaged in a constructive and honest re-assessment of present policies, marked by candor, careful analysis of reality, and an expressed willingness to change to new models of development

This new openness bodes well for policy dialogue between the GOZ and USAID around any new program that commits substantial resources to development efforts; it deserves all possible and appropriate support.

## **Recommendations and Lessons Learned**

- It is recommended that substantial new funds be made available through ZASA or a similar mechanism that include a clear role for ongoing policy dialogue and refinement. Specifically:
1. Establish a ZASA secretariate, with special responsibility for overseeing the reporting, monitoring, and evaluation of investments.
  2. Allocate resources to the recently established monitoring and evaluation section of MFEPD to provide its expertise for the oversight of existing and new projects.

This important new group should assist the Working Group and its secretariate to study, in particular, those activities given the largest resource allocations and those having policy implications related to issues raised by the economic liberalization being embarked upon by the GOZ.

3. Provide for broader membership of the Working Group, including:
  - Technical ministries and departments
  - Agricultural Parastatals

- Non-Government Organizations, including those representing communal, resettlement, and small-scale commercial farmers, and other agriculturally oriented NGOs

- Senior level women representing the interests of female smallholder farmers

4. Provide resource that are adequate and concentrated, rather than stretched out over many years at lower funding levels.

With resource flows at the level of US\$10 million or more per year, working groups can constitute effective forums for policy dialogue. At lower levels of resource flows, such groups are likely to do little more than divide funds up among competing ministries.

5. Ensure that the Working Group has a greater role than it has had in reviewing the application of CIP funds, as well as local currency funds.

## A. THE UNIVERSITY OF ZIMBABWE

## Introduction

Zasa has funded the following projects at the University of Zimbabwe, Faculty of Agriculture.

1. Purchase of the UZ Farm (1985)	value Z\$1,2 million
2. Land Management buildings (April 1985) The buildings were occupied March 1986	3,8 million
3. Research projects (September 1985)	40,000
4. Scholarships (September 1985)	80,000
5. Gokwe Farming Systems 1984	501,800
6. Irrigation equipment for UZ Farm	200,000

## Findings

- Student intake rose from 63 to 104 when the ZASA - funded Land Management Building was opened for use. The intake figure refer to 1985 and 1986 respectively.
- The building houses for the Departments of Agricultural Economics, Animal Science and Soil Science. It also houses a spacious conference hall, a large air-conditioned lecture theater, a smaller lecture theater, seminar rooms, two micro-computer laboratories, soil science laboratories, the Development Technology Centre and CIMMYT staff and FAO staff.
- The purchase of the UZ farm has enabled extra income to be earned by for use by the University, whose prime function is human resource development.
- By purchasing the UZ farm, an additional subject has been added to the curriculum of students studying for their BSc in agriculture. The subject is called Practical Agriculture Experience. Students in academic year 1 visit the farm every Saturday morning for a least 5 hours and receive practical training and techniques of farm operations. The techniques include; irrigation management, cattle dipping, combine harvesting, pen fattening of cattle, making of farm tools, yield estimation, soil analysis, etc. This practical training represents a considerable improvement in the quality of their education.
- The UZ Farm is self sustaining. A substantial proportion of the profits are ploughed back into the production process. Thus the purchase was a wise investment, which was undertaken through ZASA fundings.
- Some crops and livestock are grown for export and this generates forex.

**TABLE OF STUDENT INTAKE, UZ FACULTY OF AGRICULTURE. (1980-1989)**  
**TABLE 1A**

<b>YEAR</b>	<b>MALE</b>	<b>FEMALE</b>	<b>TOTAL</b>
1980	30	5	35
1981	33	6	39
1982	37	6	43
1983	47	7	54
1984	48	17	65
1985	60	3	63
1986	84	20	104
1987	87	16	103
1988	88	16	104
1989	88	20	108

### **Conclusions and Recommendations**

- The UZ Farm enjoys considerable organizational autonomy in its operation and as such, is able to sustain itself and respond quickly to production and market signals. It has management who are not members of the University staff. Hiring to positions of farm manager and the like are based solely on qualifications and farming competence and experience. This should set an example for other ZASA projects to decentralize the decision-making process if they are to be viable economic units. Future ZASA funding should be directed towards such projects where local staff have reasonable autonomy to solve day-to-day problems.
- The lesson for Gwebi and Chibero Agricultural Colleges is to set up farm management staff and workers who operate as a separate entity to the College. Recommendations to the Ministry are that profits from agricultural colleges should be ploughed back into the production process rather than being returned to the Treasury.

**Washington Muzari**  
**Harare, November 1990**

**B. THE NATIONAL FARMERS' ASSOCIATION OF ZIMBABWE****Introduction**

- ZASA does not actively fund operations of the NFAZ, but the farmers organization is aware of the benefits to communal farmers that ZASA projects have brought. The following information could help potential sources of ZASA fundings. The fundings cover the 7 constraint areas identified by ZASA.

**Findings**

- NFAZ receives \$36,000/yr government allocation: - 45% of the Budget goes into training farmers on how to grow a good crop.
- The NFAZ is a valuable source of information to Government and other organizations in rural development issues. Its organizational structure from village level to national level helps send signals to national level. For example, in 1989 bales of cotton were sitting by the roadside in probably the remotest part of the country, Binga. The cotton could not be delivered to the CMB because of transport shortages. The signal was sent to NFAZ leaderships, who publicized the issue at national level and got the bales delivered. Economically, this prevented a further loss in cotton quality and raised communal producers cotton income in principle.
- NFAZ also contributes in making agricultural policy because the National President of the organization sits on the Agricultural Marketing Authority Board, the major agricultural policy makers in the country.

**PROBLEMS**

The problems faced by the organization in trying to abort communal farmers are:-

- (1) Transportation of grain from the farmgate to the Marketing Boards - transport shortages.
- (2) Poor roads inhibit transport availability.
- (3) Trade liberization which gives the Marketing Boards the mandate to decontrol producer prices. NFAZ feels small farmers are still too small to be left at the mercy of market forces - they feel the Government should not relax the grip on controlled producer pricing until the small farmer is able to compete in national and regional agricultural product markets.
- (4) The NFAZ feels that the National Farm Irrigation Fund only addresses one aspect of the problem. It develops irrigation installations without developing water resources.
- (5) The NFAZ also feels that there is a shortage of funding for research that is communal - area based.
- (6) A problem faced by NFAZ is that their personnel leave for greener pastures because they cannot pay their workers competitive salaries.

## **RESEARCH ACHIEVEMENTS**

- (1) Hybrid Maize Seed (eg. by ART Farm)
- (2) Research and training in cotton production at Kadoma Cotton Training Institute
- (3) Small farmer scheme for cotton production in the Honde Valley.

## **LAND AND WATER**

- Most communal farmers are in Natural Regions III, IV and V, and production levels are only as good as these agroecological zones can allow.
- Irrigation funding should redress this issue and should be directed towards development of irrigation in these areas.

## **CREDIT AND AID**

- Credit and AID has been directed to rural depot development, site development and cotton ginnery development. ZASA has funded many of these projects.

## **Conclusions and Recommendations**

- Funding irrigation and water resources development is critical to the development of communal areas. More ZASA funded projects should be set up in the land and water problem area.
- Transport between the farm and the depot is another potential area for ZASA funding.
- Because the NFAZ has so much information and influence in the rural areas, it should be represented on the ZASA Committee that approves ZASA projects.

Washington Muzari  
Harare, November 1990

**Introduction**

- The major ZASA funded project in the Dairy Marketing Board has been the financing of the purchase of 12 trucks for the distribution of milk in the rural areas, 1987 at a cost of Z\$2 million. All the vehicles are still on the road.
- ZASA has funded the purchase of more milk distribution trucks in 1990, but the acquisition is still in progress, 90% of the milk is produced by commercial farmers, while only 10% is produced by communal farmers.

**Findings****SUCCESSSES**

- Milk intake by the DMB has risen since the ZASA - funded trucks got on the road. It rose from 237 million litres in 1987 to 256 million litres in 1990.
- The additional market outlets to the CAS enabled the DMB to sell more milk, and milk products and thus able to raise demand for intake. Farmers responded by producing more milk for sale to the DMB.
- The milage covered in milk distribution rose from 6.8 million kilometres/yr in 1986/87 to 9.4 million kilometres/yr in 1989/90.
- The operating costs have gone down from \$2,30 per km in the old fleet to \$0,80/km for the new fleet. The savings in operating costs per year is Z\$461,000 per year. Thus the ZASA investment will have paid for itself in little more than 4 years.
- The transport section of DMB is now operating as a profit centre. In addition, it enjoys decentralized decision making. Transport costs are now being incorporated into the price of milk and this is a movement towards improved efficiency of operation for the parastatal.
- Benefits to the communal areas result from more milk being made available to them to improve nutrition levels.
- Increased milk intake has resulted in the production of more milk products for export and this brings in foreign currency.

**Conclusions and Recommendations**

- ZASA funding has resulted in benefits to the DMB, the communal farmers, customers living in rural areas and the country. Movement towards organizational autonomy in the DMB transport section should act as a model for ZASA -funded projects with parastatals.

Washington Muzari  
Harare, November 1990

## **ANNEX 5**

## **Agency and Department Reports**

### **D.**

### **COFFEE GROWERS ASSOCIATION**

#### **Introduction**

- The two major coffee projects funded by ZASA to date are:
  1. The additional coffee storage capacity at Chipinge--value Z\$ 2 million
  2. Coffee hilling equipment 6,7 million
- No funding was available at preharvest stage for coffee.

#### **Findings**

##### **SUCCESSSES:**

- The funding of the Chipinge Coffee Storage Capacity has benefitted the GMB mainly, but it has also had indirect benefits to coffee producers. Benefits include:
  1. Foreign exchange earnings due to reduction of loss of quality and value of coffee while in storage.
  2. Improvement of the GMB trading account through increased earnings.
  3. Additional employment opportunities, ie. labour required to set up and maintain the additional capacity.
  4. Higher - grade coffee on the International market makes the demand and export prices for Zimbabwean coffee to rise. If export prices for coffee are high, producer prices will tend to be raised in order to encourage the production of a crop that will bring in the very valuable foreign currency.

##### **PROBLEMS**

- From the producers point of view, the major problems are related to the shortage of tractors of the 'Vineyard' type. This tractor type is used principally on coffee spraying operations. Commercial coffee producers require them in large numbers to replace the old fleet and to service increased plantings that have taken place in recent years.

#### **Conclusions and Recommendations**

- Future funding should also address activities prior to storage and processing. This will only serve to reinforce the benefits already being enjoyed by post-harvest funding, but additional benefits will also go to the coffee farmers themselves.
- Reinforcement of existing benefits will come about as a result of harvesting higher grade coffee. For example, if more tractors are purchased for spraying to control the Coffee Berry Disease, the quality of harvested coffee rises. Good storage can only maintain the coffee quality at the grade of introduction into storage, not improve it. The benefits mentioned above will thus be reinforced. In addition a savings in chemicals of Z\$4 million will also be realized.

Washington Muzari  
Harare, November 1990

**E.****COTTON MARKETING BOARD****Introduction**

ZASA has funded the following projects within the CMB:-

<u>PROJECT</u>	<u>YEAR</u>	<u>AMOUNT Z\$</u>
1. Sanyati Ginnery	1984	170,000
2. Bindura Cotton Ginnery	1985	3,000,000
3. Banket Press	1985	498,000
4. Fork Lift Trucks (30)	1986	1,300,000
5. Mahuwe Cotton Depot	1985	470,000
6. Chegutu Press	1988	750,000
7. Mutoko Depot	1990	750,000
8. Kadoma Ginnery	1990	<u>8,000,000</u>
<b>TOTAL</b>		<u>16,468,000</u>

**Findings****(i) SUCCESSSES**

- (a) The Country has benefitted through increased foreign currency earnings. The forex earnings for the cotton from Mahuwe Depot, for example, amounted to US \$4.6 million in 1989/90 marketing season.
- (b) Production of cotton has risen by over 50.0% from 5,000 tonnes to over 10,000 tonnes after the Mahuwe Depot was established.
- (c) Reduced distance to the market has resulted in reduced transport costs hence increased profitability of the production and marketing activities.
- (d) The project is self-sustaining and this has a positive impact on the parastatals trading account.
- (e) Employment for the local community is available as labourers at the depot - agricultural off-season work at the depot can supplement agricultural income. About 50 labourers are employed on a permanent or seasonal basis.
- (f) There are 3 salaried workers and one middle management employee. This is a small figure but it is a step towards solving the national unemployment problem.
- (g) Commercial - Communal benefits reinforce each other. The ZASA funds to build the depot were made available by the Commodity Import Program of the Commercial Farmers. Improved cotton quality from Communal areas due to less deterioration, post-harvest and pre-delivery makes Zimbabwean cotton

competitive on the export market. This will sustain cotton exports and help build up the producer price of cotton. Both communal farmers and commercial farmers benefit from high producer prices of cotton. The average price across grades is Z\$4.34c/kg. The bulk of the cotton is produced by the communal farmers.

- (h) The CMB has benefitted from ZASA fundings, eg. The Mahuwe Project had a gross margin of Z\$1.2 million and this is a positive contribution to the cotton trading account.

## PROBLEMS

- The major problem countrywide is the shortage of transportation to the depot for areas further away from it.

## **Conclusions and Recommendations**

- The Mahuwe Project is a profitable venture, the only funding they received from ZASA was for the setting up of the depot. Thereafter, financing was from depot or CMB proceeds. Similar projects should receive funding in the future because the economic benefits are substantial.
- Funding for purchase of trucks finances movement of cotton between CMB storage points and not from farmer to the CMB. It is recommended that ZASA funding in future be directed to address this component of the cotton marketing channel. Better transportation from the farmgate to CMB's depots is likely to push up production levels and maintain high cotton quality post-harvest.

Washington Muzari  
Harare, November 1990

**ANNEX 5**

**Agency and Department Reports**

**F.**

**COTTON MARKETING BOARD**

**Report on USAID/ZASA Programme**

**Report Submitted by  
L.T. Madzikanda  
Cotton Marketing Board  
November 7, 1990**

**REPORT ON USAID/ZASA PROGRAMME**

A meeting was held at Cotton Marketing Board Head-office at Kurima House Baker Avenue Harare. Present were the Evaluation Team from U.S.A. headed by Dr. Raynold and an Economist and Cotton Marketing Board was represented by the General Manager Mr. S.R. Nguni and Assistant General (Finance) Mr L.T. Madzikanda.

**OBJECTIVES**

- To evaluate the impact of ZASA Funding on Rural Projects.
- Benefits to the country in terms of Forex and Employment generation.
- Responsiveness by the Communal Farmer in terms of:
  - (a) Increase in cotton production
  - (b) Increase in gross income
- Look at future development strategies.

We examined the Cotton Marketing Board projects that were funded by USAID/ZASA. The projects were classified under two main headings:

- (a) Grants
- (b) Counter part funds

The first category covered the ZASA funded projects. The Cotton Marketing Board benefited from this programme in terms of funding for the construction of the Mahuwe Transit Depot, Mutoko Transit Depot and the ZASA committee has approved in principle the financing of the structural erection component of the Kadoma Replacement Ginnery.

Mahuwe Transit Depot was constructed in 1984/85 and became operation during the 1985 intake season. The depot has a staff compliment of three (3) salaried staff and 12 wage workers. During the intake season additional seasonal workers are engaged to supplement our permanent workforce.

The benefits to the Board and the country at large was the increase in production in the Zambezi valley, generation of income for the local population and this has had a multiplier effect in terms of the overall economic activity within the area. The average annual intake of seed Cotton is 11 000 tonnes and of that, lint outturn averages 3 980 tonnes.

Lint distribution is 40% Export and 60% Local. Realisations for export and local sale average Z \$6 million and Z \$6,5 million respectively. The Mahuwe project could be classified as a success, given the right weather conditions, and viable producer prices. Cotton, as a smallholder crop has a better gross margin for Z \$/hectares or = higher/return to labour compared with other crops.

The second project is the construction of Mutoko (Suswe) primary Marketing Depot. Progress on the implementation of this project was slow due to:

- (a) delay in decision on the relocation of the site from Suswe to Mutoko.
- (b) Insufficient funds for the project.

Enough funds have now been secured and relocation has been finalised. Work on the project is now progressing and it is expected to be operational during the coming cotton intake season.

The policy on Trade Liberalisation and structural adjustment could allow the Cotton Marketing Board management and the expected New Board greater autonomy in decision making on matters that will stimulate productive activity. It is expected then that Mutoko depot could benefit from increased production. Mutoko as a growth point, has been targeted for development by government in line with its policy of decentralisation. When the project is operational, the depot's contribution to the national economy will be fairly similar to Mahuwe.

The ZASA committee have approved in principle the funding of the structural erection of the Kadoma Replacement ginnery. The ginnery will make a substantial contribution to the Cotton Marketing Board. The present ginnery is over 20 years old and the cost of repairs and maintenance has rendered the depot uneconomic.

Other projects funded by the USAID are:

- (a) Sanyati Phase 1 (1984) Grant Z\$ 1,7 million
- (b) Bindura (1985) Grant Z\$ 3 million
- (c) Banket Press (1985) Counterpart Z\$ 0,498 million
- (d) Forklift Trucks (30) (1986) Counterpart Z\$ 1,3 m
- (e) Chegutu Press (1988) Counterpart Z\$ 0,75 million

The USAID has made significant contributions to Cotton Marketing Board and management would like to extend its appreciation and thanks to the U.S. Government for this assistance.

From 1984 when Cotton Marketing Board first received assistance from the USAID cotton production gradually increased from 250,244 tonnes to a record 323 tonnes in 1987/8. Problems of planting seed, viable producer prices, weather and disease have seen a decline in the production over the last three seasons.

### FUTURE STRATEGIES

The Cotton Marketing Board's strategy is to reach a million lint bales by the end of the second National Development Plan. A Review of our present ginning capacity indicates that we are able to gin up to 350 000 tonnes of seed cotton. To achieve our targeted production the Board management is proposing to increase its ginning capacity by the acquisition of additional ginneries.

### GINNING CAPACITY

	NO. OF GINNERIES	MAX GINNING CAPACITY TONNES
<b><u>PRESENT GINNING CAPACITY YR 0 (1991/2)</u></b>	<b>9</b>	<b>350 000</b>
Additional ginning capacity over the next 4 years		
year 1	1	50 000
year 2	1	50 000
year 3	1	50 000
year 4	1	50 000
	<b>13</b>	<b>550 000 t</b>

It is assumed that seed cotton intake will increase from year 1 at an average of 50,000 tonnes annually.

<u>PRODUCTION OUTTURN</u>	<u>INTAKE TONNES</u>	<u>LINT OUTTURN TONNES</u>	<u>GINNED SEED TONNES</u>	<u>GINNING LOSS TON</u>
Year 0	350 000	126 875	217 875	5 250
Year 1	400 000	145 000	249 000	6 000
Year 2	450 000	163 125	280 125	6 750
Year 3	500 000	181 250	311 250	7 500
Year 4	550 000	199 375	342 375	8 250

**LINT SALES DISTRIBUTION**

	EXPORT TONS	LOCAL TONS
Year 0	79 875	47 000
Year 1	95 000	50 000
Year 2	111 125	52 000
Year 3	126 250	55 000
Year 4	139 375	60 000

**ASSUMPTIONS**

Domestic market increases its consumptions to a maximum of 60 000 tonnes over the plan period at an average of 2 600 tonnes annually.

1) SALES REALISATION	EXPORT TONS	VALUE Z \$ 000	VALUE US \$	NET REALISATION US \$
Year 0	79 875	370 620	144 414	103 978
1	95 000	440 800	171 760	128 820
2	111 125	515 620	200 914	150 686
3	126 250	585 800	228 260	171 195
4	139 375	646 700	251 990	188 992

**1 (a) SALES REALISATION**

	LOCAL VALUE	SALES VALUE
	Tons	Z \$ 000
Year 0	47 000	135 900
Year 1	50 000	180 975
Year 2	52 000	174 000
Year 3	55 000	182 700
Year 4	60 000	191 400

**ASSUMPTIONS**

- Average gross realisation over the plan period to average US 82c/lbs or \$ 1.808/Kg or Z \$ 4.64/Kg.
- Domestic sales to be pegged against the yarn index
 

in year 0	at	\$ 3.02/Kg over 20 counts
in year 1	at	\$ 3.81/Kg over 30 counts
in year 2	at	export party F.O.B. Harare
in year 3	at	export party F.O.B. Harare
in year 4	at	export party F.O.B. Harare
- US \$ to maintain the current exchange rate Z \$ = US \$ 0,39.
- Export costs to average 25% of Gross Realisation.

**PROJECT COST**  
**(IMPORT PLANT)****V INCREMENTAL NET EXPORT REALISATION**

	PROJECT COST US \$ 000	NET EXPORT REALISATION US \$ 000	NET INCREMENTAL REALISATION US \$ 000
Year 0		103 978	-
Year 1	5 000	128 820	24 842
Year 2	6 000	150 686	21 866
Year 3	7,200	171 195	20 509
Year 4	8,64	188 992	17 797

**PROJECT COST/ %  
INCREMENTAL BENEFIT**

Year	0	Nil
Year	1	20.13 %
Year	2	27.44 %
Year	3	35.11 %
Year	4	48.55 %

**NOTES**

It is assumed that prices will increase by an average 20% annually.

From the statistics available above, it is evident that though export earnings will increase annually, the return on every dollar we invest will diminish gradually when compared to the net incremental benefit. It is worth noting that the assumptions above have ignored the local net incremental benefit derived from the above investment.

LTM/m  
7.11.90

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**F. COMMERCIAL FARMERS' UNION (CFU)  
Submission on  
COMMERCIAL-COMMUNAL DEVELOPMENT PROGRAMME**

It is incumbent upon the farmers of Zimbabwe as the custodians of the land that they be required to do all in their power to ensure the greatest possible enhancement of sustainable production in agriculture for the benefit of themselves, their families, the nation and the future generations of this land.

It is folly to believe that sub-sectors within the nation can exist in perpetuity with any security or peace of mind, knowing full well that large tracts of land are heading towards desertification. Many such areas exist today. Zimbabwe is one of the leaders on the African continent, in the context of gross agricultural production, but rides upon a diminishing time scale within which the situation must be redressed.

The Commercial Farmers' union accepts the need for resettlement of farmers currently unable to meet their aspirations because of lack of land or other constraints. The Union also accepts that in the immediate post-independence era there was a pressing need to meet the needs of the displaced and the homeless. The Union is further encouraged by recent statements that resettlement will be confined to those chosen with the ability to farm and supported by the necessary infrastructure etc.

In both the short and long term interests of all her people, it is critically important that the nation's current productive base is not eroded.

Rehabilitation of degraded land is an unbelievably costly exercise in time, money, and is beyond the resources of most developing nations.

Zimbabwe is in a position where high density subsistence agriculture exists in many of the communal and resettlement areas and modern advanced agriculture takes place in adjacent commercial sectors.

In the short term, population pressure and lack of employment opportunities will add further strain to the communal areas, which will increase the rate of land degradation and thereby exacerbate the situation.

This can be eased by the movement of capital and wealth from the developed areas to the lesser developed areas and offers a means of providing a long term solution that will result in Zimbabwean farmers enhancing the ability to sustain and improve production.

This is so because it does not threaten current production potential and reduces the possibility of further land degradation, thereby retaining a secure agricultural base from which to launch this policy to reclaim the productive potential, in the re-vitalisation and wealth enhancement of the communal areas. The policy of pumping wealth and infrastructure into potentially viable projects in the communal areas in time will result in increasing productivity over a larger area of Zimbabwe. This injection of wealth will result in job creation to those areas where people may be engaged in agriculture as a means of living, not because they necessarily wish to farm, but because they simply have no other options of survival.

It is essential that the poverty and subsistence production in the communal areas be rolled back and replaced by wealth and job creating enterprises.

#### **IMPLEMENTATION OF THIS DEVELOPMENT PROGRAMME**

The de facto position within Zimbabwe is that Government does not have the required trained people, nor the financial resources to guarantee the successful resettlement of people over a broad enough front to result in any meaningful impact upon the communal area and, at the same time, not destroy the agriculture which forms the main pillar upon which the national economy is structured.

It is unrealistic and not in the interests of the country for the private sector to sit back and expect Government to resolve the problems alone. The potential of all the private sector must be mobilised to reverse the current land desertification and reclaim the productive potential of all the natural resources of our state.

For the private sector to become fully involved and for them to assist on a sustained basis, it is essential that all programmes and projects are operated upon business lines, so that all participants can benefit financially and work towards the successful implementation of their collective enterprises.

### BASIC PLANS OF THE PROGRAMME

- (i) Potential business ventures are identified by commercial farmers and communal people, willing to undertake the joint ventures, on an entirely voluntary basis.
- (ii) All infrastructure and requirements to that enterprise must be implemented in the communal or resettlement area identified.
- (iii) An initial report and feasibility study is produced by the originators of the scheme, with special emphasis on the production plans, and financial requirements to implement the programme.
- (iv) Sources of funding for the project are identified, and here the general business community of Zimbabwe must also be approached to participate in the ventures.
- (v) Businesses established would not need to only pertain to agriculture, but could be anything viable and job creating.
- (vi) Each project would have a maturity date, determined at the onset of the programme. At or after that date the communal shareholders of the scheme may, if they so wish, purchase the shares from their commercial partners in the business in part or in whole.
- (vii) The Commercial Farmers' Union and the National Farmers' Association of Zimbabwe would act as the catalysts in identifying suitable people wishing to become involved in projects of their choice and in locating the private sector business which may also wish to take part.
- (viii) All ventures would thereby be entirely commercial, and in keeping with the broad concept of Government that in time all farmers, including resettlement farmers, should become commercial and also that resettlement and communal areas have a broad base of enterprises established to meet the need of those communities.
- (ix) Basically the commercial sector will supply the expertise and business acumen to operate the ventures successfully, while the communal sector supplies the day to day management and input requirement for their business, determined by the group as a whole, along the lines of the initial policy.
- (x) Depending upon the magnitude of the project, the group may elect to employ a suitably qualified manager or chief executive to run the venture on their behalf, who would be responsible to see that the plans set by the members themselves are fulfilled.

### CONCLUSION

This paper forms a very broad plan and merely serves to sow the seed of the concept, to roll back and reclaim the land under the greatest pressure, by injecting wealth into the areas that are most in need of it, to the benefit of all Zimbabwe.

ALAN D. P. BURL  
CFU/October1990

## **A. SCOPE OF WORK**

### **ZASA Evaluation**

Zimbabwe Agricultural Sector Assistance Program  
(613-0209)  
IMPACT EVALUATION

#### **I. BACKGROUND**

The Zimbabwe Agricultural Sector Assistance Program (ZASA), authorized in 1982, is a controlled resource transfer in the form of budgetary support to the Government of Zimbabwe (GOZ). The program, designed to contribute to productive growth in the economy, is targeted specially to help meet two kinds of Zimbabwean resource gaps: (1) foreign exchange for essential commodities, and (2) budgetary gaps in GOX programs aimed at alleviating constraints to improved smallholder farmer productivity and incomes. In the latter case, seven constraint areas are addressed:

- (1) agricultural research,
- (2) agricultural extension,
- (3) agricultural credit,
- (4) marketing and input supply,
- (5) land and water use,
- (6) agricultural manpower training, and
- (7) policy planning.

To date, \$55.0 million have been obligated under the ZASA Program: \$43.0 million for commodity importation, and \$12.0 million for technical assistance and overseas training. The commodity import program has, in turn, generated more than \$62 million in local currency (Zimbabwe Dollars) through payments by private sector importers and government entities receiving allocations of US dollars. These funds have been deposited into special accounts of the Ministry of Finance, Economic Planning and Development (MFEPD), and are programmed by an inter-ministerial ZASA Working Group for the purposes described above. Criteria used by the Working Group in making allocations require that fund releases: (1) are directed at relief of the identified constraints, (2) have the potential to improve the welfare of smallholder farmers, (3) are reasonable in terms of investment rationale, (4) will help meet an identified budget shortfall, and (5) will not impose an unacceptable recurrent cost burden on the government. To date, ZASA local currency funds have been allocated to 66 different projects. As of June 1, 1990, approximately Zimbabwe \$12 million remained available for allocation to projects.

During the early years of the program, the CIP foreign exchange facility was available to both the public (up to 20% of the total) and private sectors. This continued until 1986, when A.I.D. funding for Zimbabwe was halted for reasons extraneous to the project. When A.I.D. resumed funding in 1988 and the ZASA program received an allotment of \$5 million for the CIP, all commodity imports were targeted to private sector importers of agricultural, mining and transportation commodities in order to increase the impact of the program on the agricultural and mining sectors, both of which are large contributors to the nation's productive economy. Transportation was included because of its crucial relationship to the two other sectors. A further reduction in scope was negotiated in 1989, when another \$5 million allotment was made to the ZASA CIP. Commodity imports were limited to specified uses within the agricultural sector alone. The 1989 funding is expected to be the last tranche of monies going into the ZASA CIP, which is now in its final phase.

#### **II. OBJECTIVE**

This is to be an impact evaluation. Its central purpose is to provide a comprehensive, unbiased evaluation of the program and the impact it has had, and will be likely further to have, on the agricultural economy of Zimbabwe. Examining both of its main parts (the CIP and the local currency components), the evaluation will assess the appropriateness of the design and the effectiveness of the program with respect to its stated goal and purpose. It will analyze accomplishments, measure progress and identify successes and failures, not in the formative sense of enabling modification or adjustment to better ensure success, but in the sense of determining whether the design and the course followed by the program have had the

desired effects. In course, it will also make judgments regarding the appropriateness of the program to the economic and social setting in which it operates, including reference to the relative impact of unfocused and focused CIP elements, and will identify and articulate lessons to be learned by the GOZ and USAID from the experience.

### **III. DETAILED SCOPE OF WORK**

#### **A. STATEMENT OF WORK**

The Evaluation Team will address the following major topics:

##### **1) Commodity Import Program**

- Concept
- Procedures
- Performance
- Efficiency
- Effectiveness

##### **2) Local Currency Program**

- Concept
- Procedures
- Performance
- Efficiency
- Effectiveness

##### **3) Overall Program Impact**

- On GOZ budgets
- On GOZ policies
- On performance of the agricultural sector
- On productivity of smallholder farmers
- On welfare of smallholder farmers
- On private sector growth in agriculture
- On GOZ capacity to plan and implement future sectoral programs of a similar nature

In addressing these topics, the Evaluation Team will seek and articulate findings based on the best and fullest data available and will draw therefrom, and from objective analysis of the data utilized, such conclusions as are deemed by the Team to be germane, valid and important to the purpose of the evaluation. In its investigations and analyses, the Team will, as appropriate, devote special attention to issues affecting women, who in Zimbabwe form a majority of the smallholder population actually working the land, and to the benefits accruing to them as a result of the ZASA Program.

The Team's conclusions, along with its exposition of findings and explanation of methodological and analytical procedures used in determining and verifying findings and reaching conclusions, will form a major segment of the body of the Evaluation report.

#### **B. METHODOLOGY**

In conducting the evaluation, the Team will review program documentation, interview knowledgeable personnel of the GOZ, USAID and private sector - including non-governmental organizations (NGOs) - visit project sites, consult with intended primary and secondary beneficiaries, and undertake such other information gathering procedures as it deems necessary to its task. To the fullest extent possible, the Team will seek and utilize objectively verifiable data in its analytical procedures and will quantify those data wherever quantification will contribute to understanding of phenomena under examination. This requirement notwithstanding, the Team will also give due regard to data quality in its investigations and will

not hesitate in using subjective methods where these are appropriate in seeking findings and conclusions. Within these parameters, the Team is free to choose its own methodologies and analytical techniques in undertaking the evaluation assignment.

### **C. TEAM COMPOSITION**

The Evaluation Team to be contracted for this Scope of Work will consist of three specialists: (1) a Social Scientist/Team Leader (2) an Agricultural Economist; and (3) a Program Analyst with experience in evaluating large commodity import/local currency programs. All three Team members should have solid academic and experiential credentials matching their specialities. At least two Team members should have substantial prior work experience in Africa, preferably experience in managing and/or evaluating programs similar to ZASA. Two members of the Team, the Social Scientist/Team Leader and the Program Analyst, should be citizens of the United States. The Agricultural Economist should be a citizen of Zimbabwe not connected with the GOZ or USAID.

Although the Team itself will be an external panel, it will be augmented during the time it spends in Zimbabwe by an expert seconded by the GOZ. A Women in Development Specialist contracted separately for the purpose by USAID/Zimbabwe will work with the Team for two weeks and a Commodity Management Officer from REDSO/ESA will work for one week while the Team is in the field. Additionally, throughout its term in-country, the Team will be assisted by an officer of USAID/Zimbabwe assigned to that task.

### **IV. REPORTS AND REVIEWS**

The Team will be required to submit a draft final report on the evaluation exercise to USAID/Zimbabwe prior to its departure from Zimbabwe at the conclusion of its stay in-country, and a final report within one month of its departure from Zimbabwe. Both draft and final versions of the report will be in format and style acceptable to USAID and meet A.I.D. standards for such reports as stated in Attachment A of this Scope of Work. Twenty bound copies of the final report will be submitted.

### **V. RELATIONSHIPS AND RESPONSIBILITIES**

The Team will be responsible for completing the tasks described in Article III and submitting a final report as specified in Article IV. The Team will be under the general supervision of the Agriculture and Resources Management Office, USAID/Zimbabwe. The Mission will provide logistical support in the form of office space, a word processor and use of one (1) secretary, and a vehicle for in-country field trips as required.

### **VI. SCHEDULE OF SERVICES**

The Social Scientist/Team Leader and Program Analyst will provide seven (7) weeks of service each, beginning on or about September 20, 1990. The Agricultural Economist will provide five (5) weeks of service, beginning on or about September 24, 1990.

### **VII ARTICLE**

Forty (40) work days are ordered for the Social Scientist/Team Leader and Program Analyst, including travel time from the United States to and from Zimbabwe. Thirty (30) work days are ordered for the Agricultural Economist.

A six day work week is authorized for work to be done in Zimbabwe.

**B. SCOPE OF WORK**  
**ZASA Evaluation**  
**WOMEN IN DEVELOPMENT COMPONENT**

Zimbabwe Agricultural Sector Assistance Program  
(613-0209)  
IMPACT EVALUATION

**BACKGROUND**

(NOTE: This special Scope of Work is prepared in conjunction with the broader Scope of Work prepared for an impact evaluation of the Zimbabwe Agricultural Sector Assistance Program which will be conducted in the near future. It lays out the tasks to be accomplished by a Women in Development Specialist to be assigned to the impact evaluation team. It is to be interpreted in the context of the broad impact evaluation Scope of Work, a copy of which is attached herewith for ready reference.)

The Zimbabwean agricultural sector has experienced fundamental changes since the country became truly independent in 1980. Prior to that date, during both the colonial period - stretching from the 1890s to 1964 - and the UDI (Unilateral Declaration of Independence) period from 1964 - 1980, the sector was viewed by the government as being comprised solely of "modern" farming as practiced by the white minority which controlled most of the best agricultural lands in the country. During those periods, the large farming community within the black majority of the populace was paid little attention by the government except as it constituted a source of cheap labor for white-owned and operated farms. Blacks engaged in agricultural activities were relegated to a broadly-defined category of "subsistence farming," and little was done to contribute to their productivity. Such relations as existed between the government (and the white farming community) and black farmers originated largely from protection and control motivations on the part of the former. In 1979, the year before independence, over 90 percent of all marketed crops in the country was grown on white-owned farms.

Today, in 1990, just ten years since independence was achieved, small and medium-scale black farmers are marketing more maize, cotton, groundnuts and sunflower produce than are the white farmers, and their share in other marketed crops has increased dramatically as well. Remarkably, this great change has been accomplished without a diminution in the production or productivity of the white farming community, which continues to practice agriculture with excellent modern technologies and high-yielding results. The change has come about, rather, because of a sustained policy initiative of the Government of Zimbabwe to incorporate small-scale black farmers into the commercial agricultural sector. This policy, part of a much larger framework of policies aimed at sustainably improving the welfare and standards of living of the nation's black majority, has led to a comprehensive, coherent set of programs designed to provide small-scale farmers with needed incentives, needed inputs, and needed access to markets.

USAID/Zimbabwe has supported the Government of Zimbabwe (GOZ) in its agricultural and rural development programs in many ways. The Zimbabwe Agricultural Sector Assistance (ZASA) Program is one of the most significant of the USAID vehicles providing this support. (See main Impact Evaluation Scope of Work for a description of the ZASA Program, its purpose, objectives and methodologies.)

**OBJECTIVE**

In Zimbabwe, as in most other developing countries, women play many crucially important roles in agriculture. This is particularly so in the case of small-scale agriculture, where women are often the defacto heads of farm families because their men are away earning cash incomes to supplement meager family resources. It is estimated that, in Zimbabwe, women constitute approximately seventy percent of the adult population actually engaged in small-scale farming. They make many of the decisions affecting small farms; they provide much of the labor used on those farms; and they do these things in addition to the myriad responsibilities they hold as mothers and daughters in a strongly family- and land-oriented culture. Even when their husbands are present on the farms and exercising their perceived rights as titular heads of household, most if not all farming decisions within the family are made either directly by women or with their knowledgeable advice. Thus, it is entirely appropriate to think not only of women as farmers but of

farmers as women in the Zimbabwean context. As a group, they outnumber their male counterparts by a substantial margin.

For this reason, it is important that programs and projects aimed at agricultural and rural development in Zimbabwe be designed with the roles played by women in the rural household firmly in mind. Development activities designed and implemented without reference to or consideration of the gender of participants and beneficiaries are at best likely to be less than fully effective, at worst to be entirely inappropriate and counter-productive.

The primary purpose of this WID component of the ZASA Impact Evaluation is to provide a comprehensive, unbiased evaluation of the impact the program has had on women engaged in agriculture in Zimbabwe. Accomplishment of this purpose will provide not only a measure of what the program has achieved for this major, crucially important segment of the rural population, but also a measure - a very significant measure - of its impact overall on agricultural production, incomes and living standards in the country. Thus, while examining the program to ascertain the extent to which it has been successful or unsuccessful in meeting planned objectives, and while commenting on its successes and failures in that respect, the major thrust of this component will be to help in determining whether the design and the course followed by the program have been appropriate in terms of the gender realities of the arena in which it has operated. The major goal of the component will be to identify and articulate lessons to be learned from the experience of the program by the Government of Zimbabwe (GOZ) and USAID and, beyond that, to point to salient factors which should be considered in the design of future programs dealing with the development of the sector.

#### STATEMENT OF WORK

Because ZASA is a sector assistance program, and because it is the central purpose of this evaluation to reach findings and conclusions regarding the impact the program has had on the performance of the agricultural sector in Zimbabwe, it is imperative that the overall evaluation process be informed by insight into women's roles in agriculture and into the part women have played in the program itself. Therefore, the WID consultant will identify and focus his/her attention on gender issues associated with the evaluation team's examination of ZASA's design and implementation experience. Following the general format laid out in the main Impact Evaluation Statement of Work and working closely with other team members, the consultant will work to collect, organize, analyze, and interpret available data on:

- 1) female participation in Zimbabwean agriculture and the impact of ZASA on that participation.
- 2) governmental and social perceptions regarding women's roles in small-scale agriculture and their place as participants and beneficiaries in the planning and implementation of development-oriented programs and projects.
- 3) governmental policies guiding developmental assistance to the agricultural sector, especially as they relate to and affect women.

Specifically, the WID Specialist will work to obtain and utilize gender-disaggregated data which are pertinent to the purposes of the evaluation. Within this framework, he/she will seek answers to the questions which follow:

In relation to the ZASA program itself,

- Have women participated in proportion to their numbers and importance in agriculture?
- Have women benefitted in the same way and to the same degree as have men?
- Have activities been planned and implemented in ways that take women's needs and interests into consideration?

In relation to the government's agricultural and rural development program as a whole,

- Have women and men received equal access to resources?
- Have women and men received equal access to markets?
- Do government policies take gender differences into account?
- Are women able to access and utilize inputs made available to farmers in the same way as are men?
- If answers to these questions indicate that differentials do exist between men and women, what are the specific constraints which cause them, and what might be done to reduce or eliminate their effects?

## **METHODOLOGY, TEAM COMPOSITION AND REPORTING REQUIREMENTS**

(See main Scope of Work.)

### **TIMEFRAME**

Twenty-seven (27) working days are allocated for this component of the ZASA Impact Evaluation. Of these, it is expected that three (3) days will be spent in preparatory work in AID/Washington prior to arrival in Zimbabwe, twenty (20) days in Zimbabwe on the data collection and analysis tasks identified elsewhere in this Scope of Work, and four (4) days in post-evaluation final report completion and submission. The exact timing of these activities will be contingent upon the timing of the larger Impact Evaluation of which they are a part. It is desired that the WID specialist participate with the rest of the team in preparatory work in AID/Washington, and that his/her arrival in Zimbabwe coincide with the arrival of the larger team, so that work can be properly coordinated up to the time of the specialist's departure from the country. Submission of the specialist's report should be accomplished immediately upon his/her return to the United States so that it can be reviewed and incorporated into the draft Evaluation Report which will be submitted to USAID and GOZ before the full team leaves Zimbabwe.

## **ANNEX 7**

### **EVALUATION METHODOLOGY**

The evaluation mission began on October 22, 1990, and delivered its revised report to USAID in February 1991. Final revisions were undertaken during May 1991. The team, under the sponsorship of the State University of New York, consisted of:

- Malcolm J. Odell, Jr., Ph.D.; Team Leader/Social Scientist (US)
- Jeff Dorsey, Ph.D.; Institutional Analyst (US), and
- Norman Reynolds, Ph.D.; Agricultural Economist (Zimbabwe)

A Women in Development Specialist, Carolyn Sachs, Ph.D., from GENESYS (US), joined the team for three weeks, from October 27 through November 17. Research Assistant, Washington Muzari, a graduate student in the Faculty of Agriculture at the University of Zimbabwe, worked with the team on data collection and analysis throughout the field research process. Milton Mambo and Stephen Tangwena of the Ministry of Finance, Economic Planning and Development and Ministry of Lands, Agriculture, and Rural Resettlement arranged appropriate introductions and field trips. The USAID staff members from the Mission and Nairobi REDSO office who were to join the team according to provisions of the Scope of Work were not able to join the team as planned.

Because of the comprehensive nature of the ZASA program, its broad sectoral function, separate commodity import and local currency components, seven constraint areas, and 84 sub-projects implemented by 18 agencies, a four-pronged evaluation methodology was developed. This included (a) soliciting data and reports from participating agencies, (b) key informant interviews with senior staff from those agencies, (c) field visits to observe a cross-section of all major allocations, and (d) a sample of interviews with end-users communal and commercial areas as well as in educational and training institutions.

Field visits and meetings with GOZ officials, agencies, farmers, and private firms were conducted through November 16. An outline of the report, with preliminary narrative, was shared with USAID and the Working Group on November 9, and expanded into a first draft report which was distributed on November 19. The majority of the team members completed their in-country assignments by November 22. Because USAID staff members from neither the Mission nor Nairobi REDSO office were able to join the team as planned, the institutional analyst extended his stay through December 16th to conduct further analysis of the Commodity Import Program and both the Team Leader and Institutional Analyst undertook substantial additional data analysis and write-up in the USA during January and February 1991. A revised report was reviewed with the Mission on December 14 and a further draft, re-organized in light of changing Mission requirements and including an expanded CIP section, was submitted February 25, 1991. At the request of the Mission, the report's organization was returned to that originally proposed and minor revisions were incorporated in May 1991. Data unavailable to the team during its field investigations were incorporated into the revised drafts submitted in February and May 1991.

During the evaluation, meetings were held with approximately 110 individuals involved with the ZASA program. These included nearly 70 officials from GOZ, USAID,

farmers' unions, commodity importers, and parastatal authorities, as well as over 40 smallholders, commercial farmers, fishermen, and village leaders. Field visits took the team to Rusape, Mutare, Nyanyadze, Watsomba, Tzonzo, Gwebi, Chibero, Kariba, Victoria Falls, Mukunga and Tashinga (Mana Pools), Bulawayo, Wensledale, Kadoma, villages in Matabeleland South, Mashonaland East, and the Honde Valley, as well as numerous sites in the Harare vicinity.<sup>1</sup>

The senior officer and top administration from each ministry, department, agency, and parastatal organization receiving ZASA funds was personally interviewed, together with a cross section of field staff and/or end users, as appropriate. Each institution was asked to provide a short report and supporting data indicating the utilization of ZASA funds and their impact, and a research assistant was made available by the team to assist them in providing the relevant information. By late December between half and two-thirds of these reports were on hand for preparation of the final report. During January and February 1991 follow-up interviews were conducted in Zimbabwe by the Agricultural Economist to fill remaining information gaps, particularly those related to the end use of commodity imports, while, in the US, the Team Leader and Institutional Analyst, together with a professional editor, analyzed and incorporated the quantitative data and information, made available after the draft reports were submitted, into a reorganized and expanded draft of the report submitted to the Mission at the end of February. Dr. Robert Armstrong brought final Mission comments to the US in mid-May and the completed report was submitted during late May, 1991.

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<sup>1</sup> See Annex for list of organizations and officials contacted.

## **ANNEX 8**

### **PERSONS AND INSTITUTIONS CONTACTED BY THE ZASA EVALUATION TEAM**

#### **AGRICULTURAL DEVELOPMENT AUTHORITY**

Dr. Liberty Mhlanga, General Manager  
Dr. Made, Edward Mkhosi, ADA (Bulawayo - Model D) Project Coordinator  
Alpheas Mbayiwa, Range Supervisor  
Pias Maphosa, Counsellor for Ward 8  
M. Mbelesi Regional Planning Officer.  
Wellington Mudzamiri, Range Supervisor  
Ngiseni Muleya, Agritex Extension Worker for Ward 8  
Chief Eduard Nhlamba of the Gwaranyemba Communal Area

#### **AGRICULTURAL FINANCE CORPORATION**

T.E. Mutunhu, General Manager  
A.C. Nyengerai, Deputy General Manager  
Z. Hove, Assistant General Manager (Finance)

#### **BOARDER TIMBERS**

General Manager, Harare

#### **CIVIL & PLANNING PARTNERSHIP**

B. Musarurwa

#### **COFFEE GROWERS ASSOCIATION**

Jimmy Aitken, Chairman  
Robin D. Taylor, Chief Executive  
Mike McNamara, Production Executive

#### **COMMERCIAL FARMERS UNION**

David W. Hasluck, Director  
Phil Folks, Chief Economist  
Jerry Grant

#### **COTTON MARKETING BOARD**

Sylvester R. Nguni, General Manager  
L.T. Madzikanda, Assistant General Manager (Finance)  
B. Vaughn Evans, former Director, Cotton Training Center  
Rob Jarvis

#### **DAIRY MARKETING BOARD**

M.Z. Nyampingidza, General Manager  
Edmund Takaindisa, Project Officer, Tzonzo Milk Center  
Mavis Matongo, Secretary, Chimuriwo Grazing Scheme, Watsombe

#### **DULY'S (PVT.) LTD.**

A. Papalexis, Manager, Sales Operations

#### **FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS**

David McCulloch, Resident Representative  
Magdy Ghieth, Programme Officer

\* This list does not include individual smallholder, commercial farmers, and other end-users or beneficiaries of ZASA funding who were interviewed anonymously in the field

**GOVERNMENT OF ZIMBABWE**

**MINISTRY OF COMMUNITY AND COOPERATIVE DEVELOPMENT**

Enoch Moyo, Deputy Secretary

T. Mushayandebvu

M.J. Manyanya

Mr. Mabiki

Mr. Mugabe

Mr. Shimtamla

Mr. Shoko

**MINISTRY OF ENVIRONMENT AND TOURISM**

Department of Natural Resources

Thomas P.Z. Mpfou, Director of Natural Resources

Devious A. Marongwe, Assistant Director Extension

M.D. Munemo, Dept. of Natural Resources

M. Mugabe, Asst. Sec.

Department of National Parks and Wildlife

Willi Nduku, Director of National Parks

Harry Nyamayaro, Assistant Director (Admin.)

P. Muchonsahande, Dept. of National Parks

M. Muzari

**MINISTRY OF ENERGY, WATER RESOURCES AND DEVELOPMENT**

Mr. Remba

**MINISTRY OF FINANCE, ECONOMIC PLANNING AND DEVELOPMENT**

Augustine Nyamatore, Deputy Director, Planning, National Planning Agency

O.M. Matshalaga, Undersecretary, DIF

L.G. Morrison, Deputy Secretary, Dept. of the Accountant General

Jerry Gutu, Chief Accountant, Dept. of the Accountant General

W.S. Chirimuuta, PSIP

D.Z.P. Feresu

L. Matsuayi

MFEED. National Planning Agency

Augustine S. Nymatore

Deputy Director (Planning)

Mrs. Rudo Faranisi, Senior Planner

Stephen L. Tangwena, Planner

Robson Dhlodhlo, Planner

Mr. Dube, Planning

MFEED. National Development Fund

R. Chivingo

T.J. Chikondo

**MINISTRY OF INDUSTRY AND COMMERCE**

Victor Musandu

Ms. Ponalo

**MINISTRY OF LANDS, AGRICULTURE AND RURAL RESETTLEMENT**

Tobias Takavarasha, Deputy Secretary (Marketing)

R. Rukovo, Assistant Chief Agricultural Economist

Mr. Mafurirano, Agricultural Economist

Mrs. Casta Thomas, Asst. Sec./Ag. U.Sectyr; Finance and Project Administration

**GOVERNMENT OF ZIMBABWE**

**MINISTRY OF LANDS, AGRICULTURE AND RURAL RESETTLEMENT**

M.M.M. Mambo, Agricultural Economist

John Dickens, Agriculture Education

M. Mazwese, Projects

**AGRITEX**

Simon Pazvakavambwa, Director

Erik Chidenga, Provincial Irrigation Specialist (Mutare)

Semour Gimane, AGRITEX, (Harare)

Solomon Maina, Irrigation Manager, AGRITEX (Harare)

Karlis Palle, Supervising Engineer, DANIDA

M. Sithole, Irrigation Manager, Nyanyadze

**Chibero Agricultural College**

Principal

**Department of Research and Specialist Services**

Ronald J. Fenner, Chief

**Department of Veterinary Services**

Stuart Hargreaves, Director

**Gwebi agricultural College**

Bazibi Maphosa, Principal

R.T. Nhau, Vice-Principal

**GRAIN MARKETING BOARD**

Renson M. Gasela, General Manager

A.R.H. Hawke, Deputy General Manager (Engineering and Operations)

I. Mavindidze

Mr. Margeson (Mutare)

Mr. Lane (Mutare)

**ICRISAT (International Crops Research Institute for the Semi-Arid Tropics)**

Lovegut Tendengu, Regional Training Officer, (Ex-Principal of Chibero)

Jack Matanyaire, (Ex-Director of AGRITEX)

**KAPENTA FISHING COOPERATIVE**

Mr. Sianjeme, Chairman

M. Kwendambairi, Production Manager

**McDONALD BROS.**

Mr. McDonald, Bulawayo

**NATIONAL FARMERS ASSOCIATION OF ZIMBABWE (NFAZ)**

Robinson Gapare, President

**PIG INDUSTRY BOARD (Bulawayo)**

Mr. Michael Chikutu, Station Manager

Mr. Charles Ngirizi, Senior Stockman

**PLOUGHBOY, (PVT.) LTD.**

J. Louw, Sales Administration Manager

I.D. Robertson

**TURNPAN, (PVT.) LTD.**

Mr. Baker, General Manager

Noel Thomas, Sales Representative

**USAID**

**Theodore Morse, Director**

**Allison Herrick, Past Director**

**Stephen J. Spielman, Deputy Director**

**Douglas R. Pickett, Project Officer**

**Joshua Mushauri, ARM**

**Mary Llewellyn, Comptroller**

**Dr. Robert E. Armstrong III, SADCC Liaison Officer, & Ag. Officer Designate**

**UNIVERSITY OF ZIMBABWE**

**Mandivamba Rukuni, Dean of the Faculty of Agriculture**

**WENSLEDALE/AFRICARE**

**Kevin M. Clements, Africare Country Representative**

**Mike Mangwayana, Dir. Africare Agro-Business Training**

**WILLIAM BAIN & CO. HOLDINGS (PVT.) LTD**

**E. Campbell, Procurement Director, Harare**

**ZEMCO, Div. of Astra Holdings, Ltd.**

**O.S. Sylvester, Sales Administration**

**ZIMBABWE NATIONAL FARMERS UNION**

**Gary S.T. Magadzire, President**

## **ANNEX 9**

### **BIBLIOGRAPHY**

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