AGRICULTURAL SERVICE SUPPORT PROJECT (ASSP)

INTRODUCTION

In early 2009, the International Fund for Agricultural Development (IFAD) and the Government of Botswana (GoB) opened discussions on the possibilities of renewing the partnership to address the country’s persistent and serious problem of rural poverty.

The proposed ASSP was fully aligned with the Botswana’s development policies and strategies, specifically Vision 2016, NDP10, the National Policy on Agricultural Development, the National Food Security, the Rural Development Policy, the Revised National Strategy for Poverty Reduction, the Agricultural Sector Gender Policy, the National Policy on Women in Development, the National Master Plan for Waste Water and Sanitation and various Environmental Policies and Regulations.

IFAD’s key role will be in designing and supporting implementation of the “soft” parts of the investment such as adaptive research and extension, connecting farmer groups to the Agricultural Service Centers (ASC), helping the ASCs respond to stakeholder needs, measures to ensure participation of the target group, and institutional strengthening.

PROJECT OBJECTIVES

The objective of ASSP is to achieve a viable and sustainable smallholder agricultural sector based on farming as a business, and not reliant on subsidies or welfare measures.

The project will contribute towards economic diversification, reduction of rural poverty, food security and improved livelihoods of rural communities.

SCOPE

The ASSP will pursue a number of opportunities to improve rain-fed agricultural technologies, provide lower-cost farm mechanization services and develop a viable model for smallholder irrigation using wastewater resources.
TARGET GROUPS

ASSP will target approximately 20,000 farming households, some of which may have more than one active farmer (e.g. husband, wife, adult, and children). The primary target group will comprise smallholders experiencing household food and income insecurity, but with the potential to benefit from improved agricultural services and technologies.

Within this population there are four main principal groups for ASSP targeting:

- Smallholder households hiring tractors for land preparation and planting;
- Owners of draught animals who continue to cultivate part of their land using draught animals;
- Single women as small holder farmers, as well as women in married households; and
- Youth who are currently engaged or potential new entrants into agricultural production.

The three main Components of the Projects:

Component 1: Sustainable Agricultural Production (US$6.06 million)

- Agricultural Mechanization (US$2.23 million)
  - Formulation of a comprehensive agricultural mechanization strategy with particular attention to the role of the private sector, the need to reduce the overall level of subsidization of tractor services and introduce efficient modern agricultural implements capable of producing higher crop yields at lower costs.
  - Leasing or sale of the fleet of Government-owned tractors and implements to private machinery contractors in order to improve the productivity of these assets and provide a stimulus to private machinery contractors.
  - Tractor and implement census, a pilot scheme for re-building of existing old and non-operating tractors, and production of technical guidelines and extension materials on tractor rebuilding.
  - Establishment of a training scheme for private machinery contractors including development of training curricula, and establishment of an accreditation scheme for machinery contractors to provide services to ISPAAD.
• Assistance to contractors to develop machinery contracting into a business through developing off-season work opportunities such as haulage of produce during harvest, road maintenance, haulage of building materials, roadside grass cutting etc.

• Facilitating improved access to financial services by private machinery contractors including preparation of model business plans and provision of consultancy services to assist contractors to prepare business plans and financing proposals to financial institutions.

• Testing and demonstration of improved agricultural implements aimed to reduce operating costs and improve the quality of mechanization services. This will include the purchase of two sets of agricultural equipment per ASC to be leased to lead farmers or contractors for testing and demonstrations, together with training for the lead farmers/contractors, and consultancy services for evaluation and documentation of the demonstrations.

• Testing and demonstration of improved animal drawn implements including purchase of equipment, training of demonstration farmers and evaluation and documentation of the demonstrations.

• Training and study tours of MoA mechanization officers and private contractors to learn about different types of agricultural equipment and farming operations

➢ Improved Rain fed Agricultural Practices (US$2.69 million)

• Adaptive Research including trials on fertilizer responses over a range of soil types, agro-ecological zones and crop types at around 30 sites, herbicide and reduced tillage trials on about 20 sites, and crop variety trials also on 20 sites.

• Demonstrations in farmer fields to expose farmers to the benefits of sound agronomic practices (variety selection, time of planting, planting methods including minimum /zero tillage, tillage for both tractor and draught animal systems, weed and pest control, correct use of fertilizers, harvest and post-harvest management etc.) the project will finance all the inputs and support for half -hectare demonstration plots for the selected lead farmer’s land (3 lead farmers per sub - district)
- Technical training and study tours (internal and external) for extension workers, subject matter specialist and lead farmers.

- Farmer field schools for conservation agriculture (CA). There will be ten farmers field schools established for each ASC with around 20 farmers in each, ensuring at least participation rates of 40% for women and 40% for youth.

- **Pilot Scheme for Wastewater Irrigation (US$1.14 million)**

  This will include the establishment and operation of a 29ha wastewater irrigation scheme attached to the Palapye wastewater treatment plant. The pilot scheme will test the concept of allocating small irrigation plots of 0.5ha or less to selected households.

- A full design and an environmental impact assessment for the Palapye irrigation scheme. The cost of design will include procurement of irrigation design software and training for MoA irrigation engineers.

- Repair and re-commissioning of the Palapye tertiary wastewater treatment plant (to be funded by the Palapye municipality)

- Provision of headwork’s, drainage and other infrastructure needed for the 29ha site adjacent to the treatment plant including one kilometer of main pipe from the treatment plant to the site, a water reservoir at the site, mains and sub-mains for water distribution to individual plots, and provision of adequate electricity supply for the bio-filter and irrigation site.

- Civil works including construction of a perimeter fence, bush clearing and destumping of the site and gravelling of the access road.

- In-field development of drip irrigation systems on the allocated plots. The cost will be shouldered by the selected farmers.

- Community sensitization and participatory planning meetings with residents of the sub-districts to discuss the criteria for allocating land.

- Selection and training of farmers and allocation of plots to individuals living within the sub-district, at least 30% women and 30% youth.
Component 2: Enabling Environment for Smallholders Agriculture (US$ 16.99 million)

- **Improved Delivery of Extension Services (US$ 5.78 million)**

  This will focus on enhancing the capacity of extension service providers so as to improve the effectiveness of the extension services provided to about 50 extension areas through the ASC as well as in about 100 extension areas which are not supported by ASC.

  - Training and study tours for front line extension staff and SMSs in extension methodologies.
  - Development of gender and youth-sensitive extension knowledge packages, literature and audio-visual materials for improved dissemination of information to farmers and farmer groups.
  - Improved transport and communication logistics for extension staff (the project will fund the procurement of 75 motorbikes and 10 vehicles for use by ADs as well as the same number of mobile phones and computers with internet access)
  - Capacity building among agro-dealers to improve the availability of agricultural inputs (seeds, fertilizers, herbicides, pesticides) through commercial channels and train dealers in their correct use.

- **Agricultural Service Centers – ASC (US$ 10.30 million)**

  - Construct and equip 15 ASC. The centers are meant to facilitate farmers in their request of improving farm productivity.
  - Focus on provision of farm inputs, information, training/extension services, financial services and market linkages.

Following are three management options that will be considered for ASC:

1. **Management option 1: Public–Private Partnership**

   Government identifies the farmer-required services, provides the ASC administration block and invites the different public and private sector service providers to set up shops/service centers within the overall ASC complex. Such service providers could include the agro-dealers, private tractor-hire services, LEA/CEDA/NDB representatives, etc.
ii. **Management option 2: Public–Private Partnership**

Government identifies potential / interested private sector stakeholder works with them from the onset to set up and manage the different services at the ASCs. Government role gradually diminishes and eventually ends after a pre-determined period.

iii. **Management option 3: Private sector service provider**

Government asks for the interested private service providers to bid for the provision of the different farmer required services under Fee-For-Service contracts. Government role will be that of provision of a conducive /supportive environment for the private sector operations and to monitor and ensure the provision of quality and timely services and that the most vulnerable groups are not marginalized. The Government would make a concerted effort to encourage, strengthen and support the process of private sector involvement in the provision of services to the agricultural sector.

➤ *Institutional Strengthening (US$0.91million)*

- **Strengthening of M&E and Management Information System.**

  FAO technical cooperation in 2005-07 designed, costed and documented a project proposal to establish a comprehensive and credible M&E/MIS system within MoA with the following major elements:
  a). a result-oriented reporting system;
  b). the operation of an evaluation study cycle;
  c). a computerized management information system to support M&E;
  d). tools to update and further develop the system;

  (ASSP funding will be provided to undertake these activities during the first three years of the project).

- **At district level the project will finance and support dialogue with Land Boards to expand the cultivation of under-utilized land while maintaining security of tenure of customary owners.**
Component 3: Project Management (US$1.97 million)

- Creation of the Project Steering Committee (PSC) of concerned stakeholders, including farmer representation, to ensure that project implementation is aligned with the GoB framework and to underpin accountability and responsiveness.
- A Project Management Team (PMT) to be responsible for managing and monitoring implementation of ASSP according to procedures defined in a detailed Project Implementation Manual (PIM).
- Workshops and seminars including a start-up workshop in Year 1, annual workshops to inform stakeholders of progress and discuss implementation issues, and various meetings for specific purposes.
- Surveys and studies including baseline survey, a gender study, a mid-term review, special studies and a project implementation report.
- Gender, youth and HIV/AIDS considerations will be mainstreamed throughout project management including in terms of reference, sensitization for key stakeholders and the M&E system.

IMPLEMENTATION ARRANGEMENTS

The Department of Crop Production will be the institutional focal point of ASSP. The project’s institutional strategy is to work through, complement and strengthen the main actors at the various levels in the rainfed farming and irrigation sectors – including government agencies, parastatals, cooperatives, Non-Governmental Organizations (NGOs), Agribusiness enterprises, farmer organizations, other programmes and projects.

The project will operate in all districts, sub-districts and extension areas supported by ISPAAD. Whilst some activities will be anchored on the proposed 15 Agricultural Service Centers (ASC), others will be undertaken in extension areas that are not likely to be within the operating radius of the ASC, generally regarded as being about 20 km away.

1. Project Management Team (PMT)

The team will comprise of the Project Manager, Monitoring & Evaluation Officer, Knowledge Management Officer, Procurement Officer, Finance and Administration Officer, Irrigation Specialist and an Agronomist. The PMT will be organized into two units under the supervision of the Project Manager.
a. The Finance and Administration Unit
The Unit will include the Financial Controller as Head and the Procurement Officer. The unit will handle finance, accounts, procurement, disbursement, contracts and Memoranda of Understanding (MOU), budgets monitoring and expenditure control, and administration.

b. Planning, Monitoring & Evaluation Unit
The Unit will include the M&E officer as the Head. The unit will be responsible for planning, monitoring and evaluation, including the coordination of the preparation of Annual Work Plans and Budget (AWPB), including consolidation and presentation of budgets to the PROJECT Steering Committee (PSC), organizing support for IFAD supervision missions, progress reporting, supporting and facilitating the Mid-Term Review and overseeing the preparation of the Baseline Survey and Project Completion Report.

2. Project Steering Committee (PSC)
The committee will comprise of representatives of concerned stakeholders, including farmer representation. The PSC will be chaired by the Permanent Secretary of MoA. The key responsibilities of the PSC include providing general oversight, ensuring that necessary enabling environment is in place for effective implementation.

INNOVATIVE FEATURES, LEARNING AND KNOWLEDGE MANAGEMENT

A. Innovative Features
A series of projects and programmes have consistently failed to increase crop yields to a level where farmers become self-reliant. The ASSP initiatives are focused on raising the productivity of rainfed agriculture through a combination of low-cost farming methods and yield enhancing technologies. The project will support adaptive trials and demonstrations on farmers’ field and the acquisition and testing of new types of farm implements in order to roll-out these technologies on a broad front. These activities will support and complement ISPAAD programme, making it possible for ISPAAD support measures to be wound down as crop yields improved and costs reduced.
Another innovative feature of the project is the close engagement with the private sector for supply of farm machinery services. The Government tractor fleet will be privatized and agricultural contractors will have access to training, capacity building services and finance to develop their businesses. An innovative tractor re-building programme will be piloted in an attempt to re-commission large numbers of defunct machines. The private sector will also be engaged in operation of the proposed ASC.

The project will also support the development of a viable model for smallholder irrigation using treated wastewater.

**B. Knowledge Management and Learning Processes**

The purpose of Knowledge Management processes within ASSP is to ensure that lessons learned and good practices from other parts of the region and the world are broadly disseminated within Botswana and that knowledge generated within the project is systematically identified, analyzed, documented and shared.

The project will employ a “value chain” approach to knowledge management which does not end with the capture of information, but adds value through interpretation and analysis, drawing on information from other sources, and adapting it for use by a range of partners.

**C. Knowledge Networking**

ASSP will provide an opportunity to re-establish knowledge sharing linkages with other countries, particularly concerning mechanized approaches to conservation agriculture in semi arid conditions similar to Botswana. Attention will be given to establishing an effective network with other IFAD- supported projects dealing with agricultural productivity enhancement in Malawi, Swaziland, Zambia and Zimbabwe.

**PROJECT BENEFITS, COSTS AND FINANCING**

1. Benefits and Beneficiaries:
   - ASSP is designed to enhance the productivity of Botswana’s rainfed agriculture and address the twin issues of food security and rural poverty. This is to achieve through refocusing ISPAAD to become a more
effective instrument of rural poverty reduction and food production and piloting a scheme to develop and demonstrate a viable model of small-scale irrigation using treated wastewater.

- The major benefits of ASSP will come from amplifying the ISPAAD impacts while at the same time reducing costs. The target is to increase cereal yields from the average of about 0.25t/ha to 1.0 t/ha while using lower amounts of fertilizers, labor, and tractor power through the use of herbicides in conjunction with minimum / zero tillage methods.
- Benefits will also accrue to private sector farm machinery / draught animal operators and input dealers who will face higher and better organized demand for their services.
- The 20,000 targeted farming households will benefit in several ways that include:
  i. reduced cost of subsidies to farmers since many of them will increasingly operate profitably in a market environment;
  ii. reduced need for welfare workforce;
  iii. reduced food import needs due to higher domestic production.
  iv. capacity building on various forms (effective study tours to neighbouring countries for the different stakeholders, small scale farmers, extension works, private farm machinery operators and agro dealers).

2. Costs and Financing

Total costs, including contingencies, over the five year period, Project life are estimated at US$25.02 million. Component 1: comprises 24% of total baseline costs; Component 2: comprises 68% and Component 3: comprises 8%. IFAD will finance 22.5% of the total Project cost (about US$5.65 million) through a financing package comprising and IFAD loan of US$ 4.04 million terms and a grant of US$1.61million.

The IFAD contribution will mainly provide equipment, motorbikes and vehicles; improvement of extension outreach; technical support, on –farm research and studies.

The current estimate of the Government contribution to the project stands at about US$ 76.3% of total cost, mainly to cover the cost of construction and equipping of Agricultural Service Centers (ASC), improvement of extension outreach and salaries and allowances of Project Management Team staff.

Farmer’s contribution will be US$289 000, equivalent to 1.2% of the cost of the project, to finance in-field investments on the irrigation plots.
### PROJECT BUDGET BREAKDOWN

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<th>Totals including Contingencies (US$ ’ 000)</th>
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<tr>
<td></td>
<td>2012</td>
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<tr>
<td><strong>1. Investment Costs</strong></td>
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<tr>
<td>A. Vehicles, equipments and materials</td>
<td>3,106</td>
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<tr>
<td>B. Civil works</td>
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<tr>
<td>C. Technical Support, On-farm Research and Studies</td>
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<tr>
<td>D. Salaries and Allowances</td>
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<tr>
<td>E. Improvement of Extension Outreach</td>
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<td><strong>Total Investment Costs</strong></td>
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<td><strong>2. Recurrent Costs</strong></td>
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<td>A. Salaries and Allowances</td>
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<tr>
<td>B. Vehicle Operating Costs</td>
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<tr>
<td>C. Other Operating Costs</td>
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<td><strong>Total Recurrent Costs</strong></td>
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<tr>
<td><strong>Total Project Costs</strong></td>
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