



**New Partnership for  
Africa's Development (NEPAD)  
Comprehensive Africa Agriculture  
Development Programme (CAADP)**



**Food and Agriculture Organization  
of the United Nations  
Investment Centre Division**

## **GOVERNMENT OF THE REPUBLIC OF MALAWI**

### **SUPPORT TO NEPAD–CAADP IMPLEMENTATION**

**TCP/MLW/2906 (I)  
(NEPAD Ref. 05/11 E)**

**Volume IV of V**

### **BANKABLE INVESTMENT PROJECT PROFILE**

### **Livestock and Fishery Development Project**

*January 2005*



## **MALAWI: Support to NEPAD–CAADP Implementation**

**Volume I: National Medium–Term Investment Programme (NMTIP)**

*Bankable Investment Project Profiles (BIPPs)*

**Volume II: Commercialization of High–Value Crops**

**Volume III: Integrated Water Management and Rural Agricultural Credit**

**Volume IV: Livestock and Fishery Development**

**Volume V: Agricultural Technology Development and Dissemination**



## NEPAD–CAADP BANKABLE INVESTMENT PROJECT PROFILE

**Country:** Malawi

**Sector of Activities:** Livestock and Fisheries Development

**Proposed Project Name:** Livestock and Fishery Development Project

**Project Area:** Eight Agriculture Development Divisions (sites to be selected at appraisal)

**Duration of Project:** 5 years

**Estimated Cost:** Foreign Exchange .....n/a  
Local Cost.....n/a  
**Total .....US\$17.55 million**

**Suggested Financing:**

<i>Source</i>	<i>US\$ million</i>	<i>% of total</i>
<i>Government</i>	1.75	10
<i>Private Sector</i>	1.40	8
<i>Beneficiaries (Farmers)</i>	0.35	2
<i>Development Partners</i>	14.05	80
<i>Total</i>	<i>17.55</i>	<i>100</i>



**MALAWI**  
**NEPAD–CAADP Bankable Investment Project Profile**  
***“Livestock and Fishery Development Project”***

---

**Table of Contents**

<b>Abbreviations.....</b>	<b>iii</b>
<b>I. PROJECT BACKGROUND.....</b>	<b>1</b>
<b>A. General Information.....</b>	<b>1</b>
<b>B. Project Origin .....</b>	<b>2</b>
<b>II. PROJECT AREA.....</b>	<b>2</b>
<b>III. PROJECT RATIONALE.....</b>	<b>3</b>
<b>IV. PROJECT OBJECTIVES.....</b>	<b>4</b>
<b>V. PROJECT DESCRIPTION .....</b>	<b>4</b>
<u><b>Component 1: Beef Production.....</b></u>	<u><b>4</b></u>
<u><b>Component 2: Dairy Production .....</b></u>	<u><b>5</b></u>
<u><b>Component 3: Poultry Production .....</b></u>	<u><b>6</b></u>
<u><b>Component 4: Aquaculture Development .....</b></u>	<u><b>7</b></u>
<b>VI. INDICATIVE COSTS .....</b>	<b>8</b>
<b>VII. PROPOSED SOURCES OF FINANCING .....</b>	<b>9</b>
<b>VIII. PROJECT BENEFITS .....</b>	<b>9</b>
<b>IX. IMPLEMENTATION ARRANGEMENTS .....</b>	<b>9</b>
<b>X. TECHNICAL ASSISTANCE REQUIREMENTS .....</b>	<b>9</b>
<b>XI. ISSUES AND PROPOSED ACTIONS .....</b>	<b>10</b>
<b>XII. POSSIBLE RISKS .....</b>	<b>10</b>
<b>Annex 1: Map of Malawi Showing the Eight ADDs.....</b>	<b>11</b>
<b>Annex 2: References.....</b>	<b>13</b>



### Abbreviations

ADD	Agricultural Development Division
AI	Artificial Insemination
ARET	Agriculture Research and Extension Trust
CAADP	Comprehensive African Agriculture Development Programme
DANIDA	Danish International Development Agency
ECF	East Coast Fever
EPA	Extension Planning Area
EU	European Union
GDP	Gross Domestic Product
MoAIFS	Ministry of Agriculture, Irrigation and Food Security
MUSCCO	Malawi Union of Savings and Credit Cooperation
NAC	National Aquaculture Centre
NCD	Newcastle Disease
RDP	Rural Development Programme
USAID	United States Agency for International Development
WRA	Water Resources Area



## I. PROJECT BACKGROUND

### A. General Information

I.1. Malawi is a landlocked country in Southern Africa with a total land area of 11.8 million hectares of which 9.4 million ha is land and the rest is water. The country experiences good rainfall during the rainy season from November to April. The mean monthly temperatures range from 16°C in high land areas, 16°–26°C on the plateau and 20°C to 29°C along the lake shore. The country has a good network of river systems divided into 17 *Water Resources Areas* (WRA) with each WRA pertaining to a river basin. All the main rivers and lakeshore rivers are perennial.

I.2. By 1998 population of the country was 9.9 million with growth rate of 2 percent per year. About 86 percent of the population lives in rural areas and most of these depend on subsistence agriculture for their livelihood. About 69.5 percent and 45.5 percent of the rural and urban population, respectively, are economically active of which 83 percent is engaged in agriculture, forestry and fisheries sectors.

I.3. The prevalent breeds for **beef production** in Malawi are the local Malawi Zebu and Brahman crosses. Though these breeds are resistant to most diseases, they very low growth rate as well as conversion efficiency. The majority of cattle are kept in a traditional manner under very low standards of husbandry. They are communally grazed and only a limited number of farmers practice supplementary feeding using crop residues. However, a small number of feedlots have been established in the lower Shire Valley. These feedlots rely on biogases and molasses from the nearby sugar factory to improve the feed.

I.4. The feeding of cattle is constrained by the inadequate availability and poor quality of feed as a result of the depletion of natural grass in most of the areas in the country. Land limitation has deprived the livestock industry of grazing and increased reliance on crop residues that are also used for firewood in some areas. As a result of the shortage of feed, most farmers are forced to reduce the number of their animals during the dry season.

I.5. **Poultry** constitute the largest and most popular livestock species in Malawi, more especially chickens which were estimated to number approximately 10 million and are kept by 80–85 percent of the almost 2 million rural households. Chicken is the most common source of income and animal protein in both rural and urban areas. The majority of Malawians keep poultry under an extensive free-range village system that suffers from serious problems such as low productivity, poor nutrition, high predation and disease.

I.6. **Fish production** contributes 4 percent to Malawi’s GDP. The fish are produced mainly from capture fisheries, which make a significant contribution to food security. It is estimated that capture fisheries provide employment for about 290,000 people, of which 15 percent are individual business, subsistence fishermen or employees of large-scale operators, and 85 percent are engaged in fish processing, distribution and the supply of inputs. Fish account for 65 percent of national animal protein consumption, 45 percent of all national protein consumption and 75 percent of the protein consumption of urban and rural low-income households. In recognition of the importance of fish, the Malawi government is promoting sustainable wild fisheries harvesting and has embarked on a countrywide program to promote the development of aquaculture at both the subsistence and commercial farming level.

I.7. The livestock sub-sector in Malawi is relatively small and undeveloped. It contributes only about 7 percent to agricultural GDP and just 12 percent to the total value of agricultural production. However, over 50 percent of the 2 million smallholder families are involved in livestock production. Only 10 percent of total household expenditure is on livestock products which account for about 1.3 percent of total dietary protein intake. Current production and consumption levels are woefully insufficient by international standards, and even below sub-Saharan levels. Animal populations are estimated at 619,000 cattle, 1,600,000 goats, 102,000 sheep, 313,000 pigs and 10,366,000 chickens. These populations are considerably low and those for cattle have been decreasing since 1987.

I.8. In view of the anticipated increase in population to about 15 million from 12 million by 2010 Malawi will face massive deficits in the supply of animal protein if food production, including livestock, does not grow faster. Unless production increases, the country will have to continue to import substantial amounts of livestock products, which could be a drain on foreign reserves.

## **B. Project Origin**

I.9. This project was proposed after the national consultative workshop on the NEPAD-CAADP initiative which was held in May 2004. Livestock development is also a priority under CAADP and it falls under pillar 5. It was noted at the meeting that only a small proportion of the farming families in the country practice intensive livestock husbandry techniques while the majority use low input-low output management systems. As a result, marketed livestock products come from a small number of large-scale commercial enterprises. In addition, the dairy industry is still small and vulnerable although it has considerable potential for growth.

I.10. It was also noted that the development of the livestock sub-sector has long been hampered by inappropriate government policies.<sup>1</sup> As a result, the performance of the sub-sector has been poor. Only during the past few years has the sub-sector received some attention in recognition of its contribution to household food security and human nutrition. However, the strategies that have been implemented seem not to have been successful. This project is therefore proposed to address some of the problems that have arisen due to the inappropriate policies and strategies.

## **II. PROJECT AREA**

II.1. For the livestock and dairy components of the project it is recommended that pilot projects be implemented in all the eight *Agricultural Development Divisions* (ADDs). Specific areas for implementation will be identified during the project appraisal stage.

II.2. According to a study conducted (Maluwa, 2001), the most suitable areas for commercial fish farming lie along the lakeshore areas, all the way from Karonga to Mangochi and the Shire valley. It is therefore proposed that the aquaculture project be implemented in these areas. The hot weather experienced in these areas is also favourable for fish growth throughout the year. The areas have good soils that could allow for easy and effective pond construction. Water is also readily available from either the lake or Shire River. Upland areas of northern Malawi are particularly suitable for aquaculture due to the abundant water resources in the perennial streams.

II.3. The specific areas for the aquaculture project are the Lower Shire, Zomba and Mwanza in the Southern Region of Malawi, the Lakeshore areas stretching from Karonga down to Mangochi, and

---

<sup>1</sup> Government of Malawi, Ministry of Agriculture. Review of Malawi Agricultural Policies and Strategies.

Lilongwe, Dowa and Kasungu in the Central Region. These areas are preferable because research has shown that they are the most suitable for aquaculture development due to their favourable biological and ecological conditions. It is therefore recommended that they receive the highest priority for aquaculture development.

### III. PROJECT RATIONALE

III.1. Animal protein supply in Malawi is limited due to the low availability of animals (cattle, goats, poultry and fish) and animal products. High levels of beef and dairy production could contribute significantly to the consumption of high value protein, especially in the cities and towns.

III.2. The *Agricultural and Livestock Development Strategy and Action Plan*, the government’s main guiding document for the development of the livestock sector states that “*a cornerstone of the dairy strategy will be the expansion and improvement of the national dairy herd and that the estate sector will be encouraged to expand dairy production, including the provision of artificial insemination services*”. Thus this project will aim at expanding the dairy production.

III.3. In addition, the recently conducted in-depth study of the livestock sector sponsored by DANIDA states that in the immediate future, any significant expansion of the national dairy herd will have to depend on additional heifers being procured from commercial farms within Malawi, as well as imports to bridge the gap. The proposed project is therefore consistent with the priorities stated within the government’s major policy documents.

III.4. Poultry is one of the most important sub-sectors in livestock development in Malawi; however there are several constraints that limit the expansion of this important sub-sector. The free-range system under which most chickens are reared in Malawi is highly susceptible to numerous problems such as predation, uncontrolled breeding, low weight gains, low egg production and the prevalence of disease. As a result, mortality rates are very high, productivity is very low, and egg production is extremely low.

III.5. The most serious disease problem is Newcastle disease (NCD) that can have a devastating effect on un-inoculated flocks. The disease normally attacks birds during the hot months of August to November and can wipe out 50–65 percent of all village chickens. These have had a negative effect in the production of poultry in the country.

III.6. In an effort to improve the productivity of rural chickens, the government initiated a rural chicken improvement programme in the mid-1960s by introducing a dual-purpose bird (Black Australorp) for crossing with the indigenous rural bird. However, government’s efforts to improve the availability of Black Australorp (Mikolongwe chickens), which is larger than the local chickens, have not yielded the expected results. The government had only three hatcheries to cater for the entire country and these have failed to produce adequate numbers of birds due to a number of constraints such as inadequate operating funds and lack of suitable and up-to-date capital equipment.

III.7. In light of this background information, this project will introduce a number of hatcheries that will improve the supply of chicks both Black Australorp and commercial breeders to the farming community and hopefully the supply of both meat and eggs will improve. Secondly, the project seeks to control Newcastle disease, which is the biggest challenge to production especially in the rural flocks. The project also seeks to make high quality feed available to the poultry farmers by training staff and farmers on local feed formulation.

III.8. Recently, the country is experiencing low levels of catch due to over-fishing and pollution of in the main water bodies in the country. Small-scale catch in Lake Malawi has greatly dwindled and this has resulted into high prices of fish and fish products in the country. This project will therefore aim at supplementing the current catch of fish in the country.

#### IV. PROJECT OBJECTIVES

IV.1. The objectives of the project are to:

- Develop a more demand driven approach to livestock husbandry and disease control for beef and dairy animals, poultry and fish;
- Increase numbers of cross-bred dairy animals in the country;
- Promote fish production through semi-intensive aquaculture technologies;
- Identify and promote appropriate technologies for the Malawian smallholders especially pond construction, fingerling production, fish feeding techniques, harvesting, marketing;
- Promote the establishment of aquaculture producer groups for effective extension services; and
- Build the capacity of the *National Aquaculture Centre* (NAC) and the *Department of Fisheries* staff in the target areas.

#### V. PROJECT DESCRIPTION

V.1. The project will encompass sub-components in beef, dairy, poultry, and aquaculture development. The sub-components are detailed in the following section.

##### **Component 1: Beef Production**

V.2. The first sub-component will involve sensitizing the estate sector through the *Department of Animal Health and Livestock Development* and the *Agricultural Research and Extension Trust* (ARET), about the benefits of rearing cattle along side their usual crop farming business. Estates stand to benefit a lot if they produce both beef and their particular crop. The livestock (beef) could be used to supplement on the income as well as provide food for the estate tenants. The project implementation unit that will be established under this project will facilitate the procurement of the stocks for the estates that will show interest after being sensitized. Due to the problem of East Coast Fever (ECF), the *Ministry of Agriculture, Irrigation and Food Security* (MoAIFS) through its *Livestock Department* will provide proper animal health care to check the spread of the disease in the project areas.

V.3. The project will also prepare and update an inventory of beef production technologies throughout the country in consultation with all stakeholders including farmer representatives, the private and public sector institutions. The purpose for undertaking this activity will be to take stock of the existing beef production technologies and at the same time explore potential areas of intervention. The Ministry will of Agriculture will undertake this exercise.

V.4. In addition the project will promote the multiplication of appropriate breeding stock at producer level. Five beef cattle stud breeders will be identified and supported in the selected ADDs to

ensure future sustainable production of breeding animals. The support will mainly be in the training of MoAIFS officials in these areas on how to select and breed appropriate breeds. For sustainability, the officials will be expected to train lead farmers in their areas on how they can maintain a good breed. The ADDs that will be targeted are Shire Valley, Machinga, Salima, Karonga, Blantyre and Mzuzu.

V.5. The project will promote the production of feeds with deliberate efforts being oriented towards the development of feed by the communities through technical support that will be provided by MoAIFS staff to selected communities on managing pastures as well as pasture nurseries<sup>2</sup>. The establishment of pasture nurseries is envisaged to facilitate expansion of fodder production in all the ecological areas that are suitable for beef production in the selected ADDs.

V.6. The smallholder farmers that are interested in beef production will be encouraged to organize themselves into village committees. The MoAIFS, through its livestock development officers in the selected ADDs, will facilitate the processes of forming these committees. An individual from each village committee will be identified and provided with systematic training on production and marketing of livestock. The trained individual will in turn train his fellow farmers in the committee. The training will emphasize on simple and easy to understand instructions that could easily be understood by the majority of farmers who are mostly semi-illiterate or completely illiterate. The project will support the production of these simple materials. The smallholder farmers will also be trained in basic financial management to enable them run their businesses.

V.7. Currently, the market of beef animals in the country is not functioning. Previously farmers used to sell their cattle at Livestock Auction Markets which were run by the government. Due to Liberalization and privatization policies the government withdrew from these markets and unfortunately the private sector has not taken the challenge to fill in the gaps. Farmers are now forced to sell their cattle to individuals in unorganized marketing systems. There were livestock committees in the past that were responsible for the running of these markets. The project will aim at revitalize and reorganizing cattle marketing through capacity building of livestock marketing committees so that they can be commercially oriented. Training will be provided to these committees on how they can run these markets commercially.

V.8. The idea of selling through committees will help in the committees’ negotiations for good prices and they can also pull their products as a committee to increase the quantity of their produce. All members of the marketing committees will be trained in marketing procedures to improve the operation of livestock markets. It will also foster linkages between farmers and potential beef markets by organizing regional collaborative meetings with supermarkets and other beef outlets. Regular meetings will be conducted in each region in order to promote sales of beef.

## **Component 2: Dairy Production**

V.9. The dairy development will involve among other activities, the breeding and multiplication of dairy cattle. The multiplication will cover all the milk shed, areas namely Blantyre, Zomba, Lilongwe and Mzuzu. Others areas involved in the production of heifers will be Phalombe, Mangochi, Salima and Mzimba. In these all areas 20 farmers will be selected by the MoAIFS in liaison with staff from other projects that are active in the promotion of dairy farming like the Land O’Lakes to participate in a cross breeding programme. Under this programme, farmers will be loaned a pure bred Friesian bull and at least 5 or 7 Friesian cows. Once, the cows give birth the farmers will give some of

---

<sup>2</sup> These are areas where seeds for pasture will be produced before they are transplanted into the main pasture fields.

their calves to other farmers through the project management unit. The bulls that might be produced may be used for fattening. If well planned the program will benefit many farmers and will improve milk production. The programme that is being undertaken be Land O’Lakes may be replicated.

V.10. In order for the animals to produce annually, and to rapidly introduce improved germplasm into the herds of smallholder farmers, there will be need to train both technicians and selected smallholder farmers in artificial insemination (AI). Fifteen farmers in each milk shed area will be trained in both AI and heat detection. Farmers will also be trained because they are closer to other smallholder farmers. The project will, in collaboration with the proposed *Dairy Training Centre* in Mikolongwe, up-grade the skills of artificial inseminators. The project will also provide the technicians with motorcycles which will be handed over through the government’s existing motorcycle ownership scheme. It is envisaged that the AI technicians will train farmers in AI techniques. It is expected that a total of 2,000 farmers will be trained in artificial insemination techniques. These farmers will be loaned basic equipment such as flasks, an insemination gun, sacks, and a bicycle. These trained farmers will then be able to sell their services to other farmers, thereby developing a more sustainable and manageable AI service.

V.11. In addition, dairy farmers will be trained in good husbandry practices such as good housing and feeding so as to improve their general management standards. All new farmers that are interested in venturing into dairy production will be trained so that they can establish pastures before receiving dairy animals.

V.12. Pure breed Friesian cattle will be purchased from within and outside the country as is being done under the Land O’Lakes project for the production of pure breed dairy animals. These will serve as an elite herd which will be used to produce pure bred animals for crossing with the local Malawi Zebu so that the resultant bred can be adaptable to the local situations in the country. Interested private farmers (Estate Sector) will be encouraged to go into breeding programs of the animals. It is envisaged that *Department of Animal Health and Industry* staff will identify commercial farmers or groups of smallholder farmers who are not only willing to implement a cross breeding programme, but are also capable of doing so. The project will procure dairy bulls and distribute them to interested farmers in project areas where artificial insemination may not be feasible.

V.13. The project will facilitate the formation and strengthening of dairy farmers associations and also encourage formation of dairy cooperatives. These organizations will enable farmers to sell their milk in bulk and also allow them to purchase some inputs in bulk. It will also be easier for them to negotiate for better prices once they are organized into groups.

### **Component 3: Poultry Production**

V.14. The poultry production component will involve training farmers in poultry production and slaughtering techniques. Farmers interested in poultry production and operating slaughter facilities will be identified and trained in modern methods of poultry production. It is expected that about 4,000 farmers will be trained by the end of project life (5 years). Meetings shall be conducted during the project implementation to sensitize farmers at the *Extension Planning Area* level<sup>3</sup> and urban areas on the importance of following new methods of producing poultry. A total of 365,000 breeding stock shall be produced and distributed to farmers within the first three-year period. Marketing systems that

---

<sup>3</sup> *Extension Planning Area* is an area with similar agro-ecological zone under the responsibility of a Development Officer of the MoAIFS and he is supported by several Field assistants (frontline extension workers).

will allow easy movement of egg and meat movement from the rural areas to urban areas shall be established. These are traditionally areas of high demand for these products as evidenced by the fact that the government sometimes is forced to import these products from neighbouring countries to fill the demand gap.

#### **Component 4: Aquaculture Development**

V.15. To facilitate farmers’ access to extension services and the market, they will be encouraged to voluntarily form aquaculture associations/cooperatives. Cold rooms will be constructed and managed by the groups themselves so as to facilitate fish storage, prior to transportation to market. Farmers will, through their associations endeavour to identify markets for their products. The demand for fish in Malawi is huge and, as a result of the increase in population, consumption per capita has declined considerably. The major cities will obviously be the major market for the fish.

V.16. The success of the project will very much depend on the ability of farmers’ access to high quality fish seed (fingerlings). Fish fingerlings are available at the *National Aquaculture Centre* (NAC) but the quantities are not adequate. The institution is constrained in its capacity to produce enough fingerlings to cater for the whole nation due to lack of resources. The project will therefore support the NAC to increase the production and supply of the fingerlings to the farmers. The demand for fingerlings will obviously grow as a result of the project. Therefore, the project will also identify and train farmers who will specialize in commercial production of fingerlings.

V.17. The most preferred fish species in Malawi are tilapias that were introduced from where?. Most Malawians like Crambo (*Oreochromis nyasalapia*). The species that are widely farmed are *Tilapia rendalli* and *Oreochromis shiranus*. Crambo have only recently been introduced into aquaculture. *Oreochromis mossambicus* which is indigenous in the Lower Shire River has been farmed at Kasinthula alongside the other two tilapias, *O. shiranus* and *T. rendalli*. Tilapias are suitable candidates for aquaculture world wide because of their high market demand, ability to adopt to a wide range of environmental conditions, and their ease of reproduction. The market in Malawi readily accepts tilapias.

V.18. For the Lower Shire area, the project will target the indigenous *O. mossambicus* which has been farmed at Kasinthula, as well as *O. shiranus* and *T. rendalli*.

V.19. The main problem with tilapia culture is uncontrolled breeding which results in over population of ponds and a switch from somatic growth to reproduction at a small size, i.e. breeding occurs below 20 g in body weight. This phenomenon is known as stunting or ranting.

V.20. The tilapia industry worldwide has thrived through the production of all-male fish. Males grow faster than females and they do not stunt because the absence of females inhibits reproductive behaviour. The project will therefore identify experts to train producers of fingerlings to manually sex the fingerlings so as to produce male fish only. At 15–20 g, the tilapia fingerlings will be manually sexed and only will be selected for stocking of the production ponds. The advantage of manual sexing is that it is easy and applicable to Malawian conditions. It is also sustainable if the farmers are well trained, and it is low cost.

V.21. The project will also explore the possibility of introducing high-yielding and fast maturing tilapia species. One such species is *O. niloticus*. Production of this species has proved successful in neighbouring countries (e.g. Zimbabwe). The species can grow to over 5 kg in considerably less time than Crambo and is therefore good for the production of fish fillets for export. The Lower Shire area

could be a suitable area for the introduction of this new species because the fish would be unable to swim upstream to disturb the natural ecosystem of Lake Malawi.

V.22. The NAC will be supported to find ways of introducing this species as well as other new tilapias in the country. It will also be tasked with developing appropriate and improved technologies that for management of these species under local conditions.

V.23. Aquaculture is not widespread in Malawi. As a result, fish production technologies and management systems are not known by most farmers. The project will therefore endeavour to train the farmers in various areas of aquaculture. The areas will include:

- Pond construction and management;
- Fish feed preparation and feeding;
- Fish stocking;
- Fish harvesting and processing;
- Disease control;
- Integrated aquaculture;
- Business management.

V.24. To provide this training, extension workers in the *Department of Fisheries* must have the required capacity which is presently lacking. The project will therefore have a training component for these workers as well.

V.25. Research institutions have a very important role to play in the development of aquaculture in the country. Aquaculture research is required to identify fish species that are suitable for commercial aquaculture, and to identify fish feeding and rearing technologies that are suitable for both small and large-scale aquaculture in the country

## VI. INDICATIVE COSTS

VI.1. It is expected that the project will cost about US\$17.55 million over a period of five years. The summary of the costs is outlined in the table below.

Item	Cost (US \$ million)
Beef cattle development	1.75
Poultry development	1.40
Dairy development	1.20
Commercial aquaculture.	2.70
Agricultural loans	5.00
Capacity building – Training	1.50
Rural infrastructure (construction of cold rooms etc.)	3.00
Market Information System development	0.50
Project management	0.50
<b>Total Project Cost</b>	<b>17.55</b>

## **VII. PROPOSED SOURCES OF FINANCING**

VII.1. Project finance will come mainly from government coffers and Malawi’s development partners. It is expected that the government will commit financial resources to this project in its annual budget. There are several development partners that are interested in supporting the livestock and aquaculture development project, the most notable being the EU and USAID.

## **VIII. PROJECT BENEFITS**

VIII.1. The project will benefit mainly smallholder farmers through the provision of improved services for livestock, poultry and fish. For the livestock (is this not specifically for beef) development project it is expected that each of the eight ADDs will recruit 5 stud breeders, i.e. a total of 40 farmers will participate in the project as stud breeders. Offspring from these stud breeders will be sold to multiplier farmers. It is envisaged that each ADD will have 20 groups and hence a total of 2 400 farmers will participate in the project as multiplier farmers.

VIII.2. If it successfully implemented, the fisheries project will make fish readily available in both rural and urban markets. Fish is a very good source of protein; hence easy access to it will help reduce malnutrition at the household level. Fish will also increase the incomes of the project beneficiaries. It is expected that the introduction of aquaculture will also result in the emergence of small business networks in the project areas because fish farmers will need raw materials, some of which may be supplied by other villagers (e.g. maize bran, manure, etc). Some people will benefit by acting as fish traders who will buy from the farmers and sell in other areas. In this respect, the aquaculture project will create much needed employment opportunities in the rural areas.

## **IX. IMPLEMENTATION ARRANGEMENTS**

IX.1. The Project will be implemented by the MoAIFS through the *Department of Animal Health and Livestock Development*.

IX.2. The *Planning Unit* of the *Department of Animal Health and Livestock Development* will coordinate monitoring activities in close collaboration with the *Central Monitoring and Evaluation Unit* at MoAIFS headquarters and the ADDs where the project will be implemented. The department will conduct a baseline study and an ex-post impact assessment. Monthly progress reports and supervisory visits will serve as a means to collect information with regard to the progress of the project.

IX.3. The project beneficiaries themselves will participate in monitoring the project through review meetings which will hold on a quarterly basis. government staff, private providers of extension and veterinary services, and the beneficiaries will participate in the review meetings.

## **X. TECHNICAL ASSISTANCE REQUIREMENTS**

X.1. The project will need technical assistance in the first two years, especially in the establishment of farmers’ organizations and establishment of the *Market Information System*.

## **XI. ISSUES AND PROPOSED ACTIONS**

XI.1. Livestock theft is a very big issue in the country and most farmers are not interested in keeping livestock due to this problem. The government should encourage community policing in order to curb the problem.

XI.2. This project is very big and will therefore require a high level of management. There will be a need for a strong coordinating unit. The government might need technical assistance for the management of the project.

XI.3. The construction of fish ponds could result in serious environmental problems, especially if not done properly. To address this important issue, it is recommended that an Environmental Impact Assessment (EIA) should be carried out any project is implemented.

## **XII. POSSIBLE RISKS**

XII.1. Most of the finances are expected to be sourced from co-operating partners. However, the country may experience delays in sourcing such funds. The solution lies in the government vigorously marketing the project proposal to potential funding agencies.

XII.2. This project involves many activities and will therefore require an experienced and competent management team. The government needs to institute a strong and vibrant coordination unit for the project that will be able to monitor and advise on the progress of the project.

XII.3. The project's success depends on the willingness of government officials and political leaders to make sure budgetary allocations are made to the project. In this regard, the government, and more specifically the NEPAD Focal Point, should be constantly reminded of the country's commitment to the both the NEPAD and CAADP initiatives. More importantly, both government and its officials should keep in mind that under NEPAD, the government has pledged to devote 10 percent of its budgetary resources to agriculture by 2008.





## **Annex 2: References**

1. **Government of Malawi.** 1999. Review of Malawi Agricultural Policies and Strategies, Ministry of Agriculture and Irrigation, November 1999.
2. **Government of Malawi.** 2002. Agricultural Sector Priority Constraints Policies and Strategies Framework for Malawi; March 2002
3. **Ministry of Agriculture and Livestock Development.** 1997. Major Policies, On-going Projects and Proposed Areas of Intervention in Agriculture and Livestock Sector. Lilongwe, Malawi.
4. **MoAIFS.** 1998. National Livestock Development Master Plan (NLDMP). Department of Animal Health and Industry, Ministry of Agriculture and Irrigation, Lilongwe, Malawi.