



الهيئة العربية

للإستثمار والإنماء الزراعي

**ARAB AUTHORITY**

FOR AGRICULTURAL INVESTMENT AND DEVELOPMENT

## Studies and Research And Development Activities





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## Studies

AAAID prepares and assesses preliminary and final feasibility studies, evaluates, restructures, rehabilitates and expands its established companies. AAAID also assesses studies prepared by its consultants or studies received from its promoters in member states. Further, the Authority coordinates and cooperates with the relevant departments in AAAID's investee companies to study the problems and technical challenges facing its established companies.

### ■ Project Process Mechanism

- 1- Exploring and identifying promising investment opportunities received from investors/promoters in the form of preliminary studies or investment ideas.
- 2- Corresponding with investors to introduce AAAID's investment mechanism, the approved feasibility study preparation and acceptance criteria.
- 3- Evaluation of preliminary feasibility studies received from investors/promoters or prepared by consultancy firms.
- 4- Preparation of Terms of Reference for feasibility studies and preliminary studies and preparation of preliminary studies and integrated feasibility studies for projects.
- 5- Preparation of Requests for Proposals (RFP's) for consultancy firms for the preparation of feasibility studies and evaluation of the proposals presented by consultancy firms.
- 6- Presentation of project studies and memorandums to the Advisory Committee that includes AAAID's Heads of Departments then to the Board of Directors.
- 7- Participation in the technical teams and committees and the management of AAAID companies as well as workshops, exhibitions and conferences relevant to the department's work.

Figure (1) shows the project cycle process starting from the exploration/identification of the investment opportunity, preparation of the preliminary and final feasibility study, project approval by the Board of Directors, supervision of the implementation and entrance into technical commissioning and commercial production.

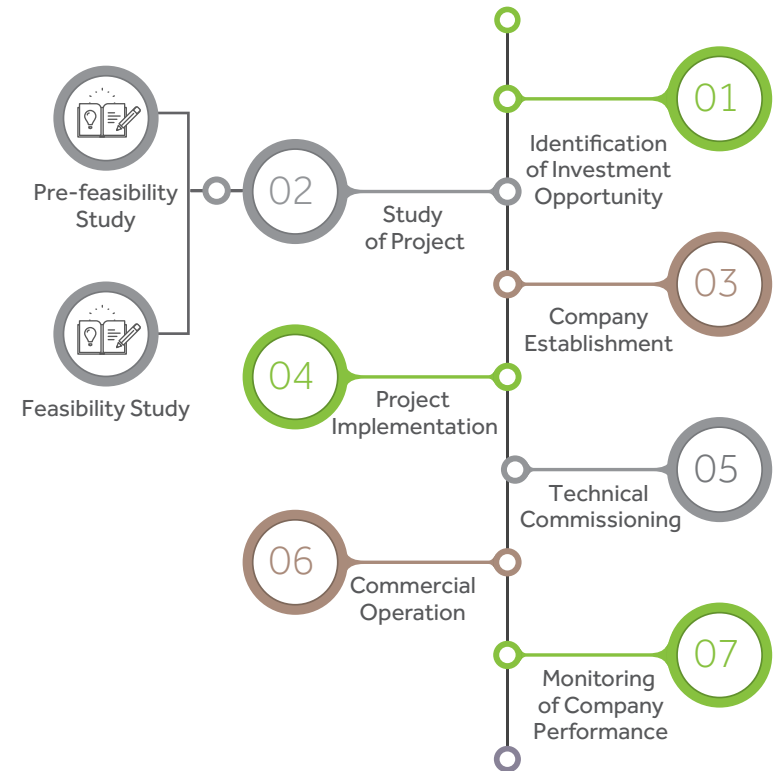


Figure (1) Project Study and Establishment Cycle

AAAID deals with projects investment proposals received from interested promoters in addition to the investment opportunities in the agricultural sector identified through the analysis of investment opportunities through sending technical teams to Arab countries that have the main potential-for establishing agricultural projects and have a comparative advantages.

**Figure(2) shows AAAID's mechanism in dealing with received agricultural projects.**

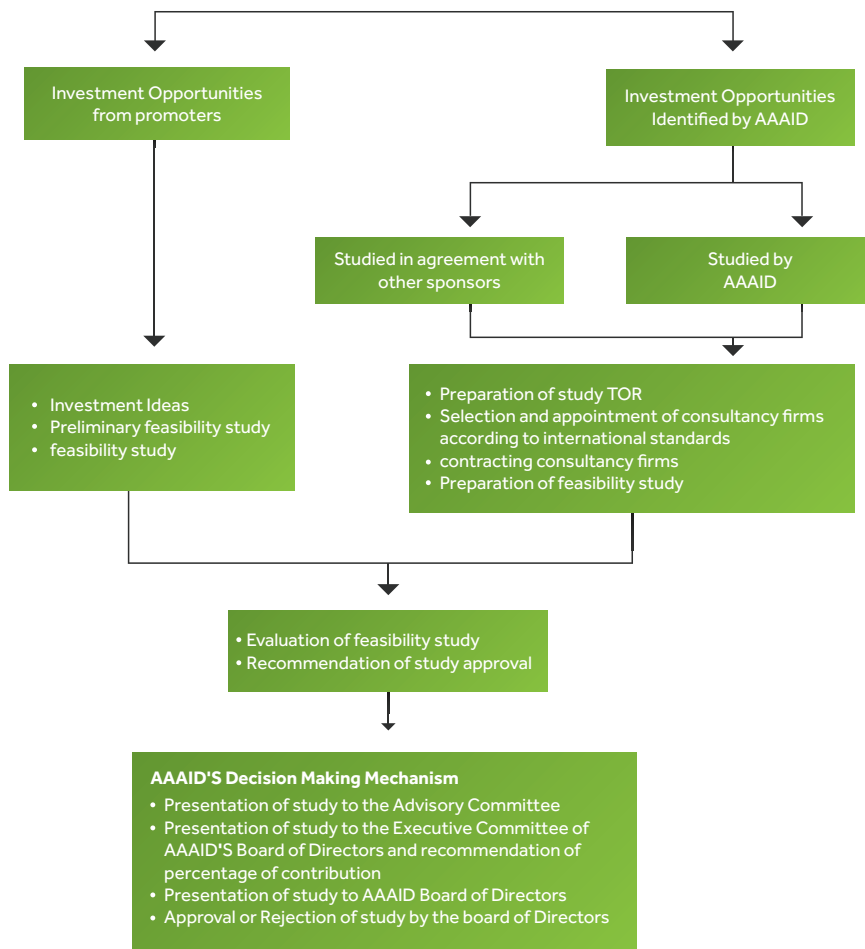


Figure (2) AAAID's Agricultural Project Handling Process

### ■ AAAID's Agricultural Project Selection Criteria:

**AAAID's Strategy has defined the following approved criteria for project selection that will help in preliminary project screening according to these criteria. Below are the considered criteria for Project Selection:**

- 1- The project should be aligned with AAAID's vision and objectives in the production of basic food products that contribute to the reinforcing of arab food security as well as grains, refined sugar, meat, dairy, vegetable oils.
- 2- The project must be integrated between agricultural production and agricultural processing in one member state or between member states. the project may utilize unused agriculture resources or primary/intermediary products produced in the arab countries.
- 3- Projects under study should apply technology whenever possible.
- 4- Commitment from promoters to invest in the project with a strong financial background and significant experience in promoting similar projects.
- 5- Availability of a full feasibility study of the project.
- 6- The Project's feasibility study should include an appropriate exit strategy.
- 7- The Total Investment Cost should not be less than USD 20 Million.
- 8- AAAID participates in the equity capital of the project within a range of 25% to 49% of the equity of the project.
- 9- The project's internal rate of return (IRR) should not be less than 12.5% (considering country and project's risks).
- 10- Equity should be between 40-60% from total investment Cost.

## ■ Investment Priorities in Food Commodities:

The Arab Authority is concerned with the production of basic food commodities in accordance with its strategic objectives to contribute in reducing the food gap facing the Arab countries. These commodities are obtained through the establishment of new integrated strategic projects in addition to rehabilitating and expanding existing companies.

**The estimated food gap in the Arab countries in 2016 is as follows:**

	Basic Commodity	Volume of Deficit Million Tones	Value of Deficit (USD Billion)	% of Deficit
1	Refined Sugar	9.62	3.15	72%
2	Oil	4.80	3.02	68%
3	Grains such as (wheat, corn, Soya Bean and Barley)	67.25	16.27	57%
4	Meat	3.24	6.36	28%
5	Milk	8.68	2.45	34%



### Source

- The Annual Book of Arab Agricultural Statistics Arab Organization for Agricultural Development 2016.
- Arab Food Security Report - Arab Organization for Agricultural Development 2016.

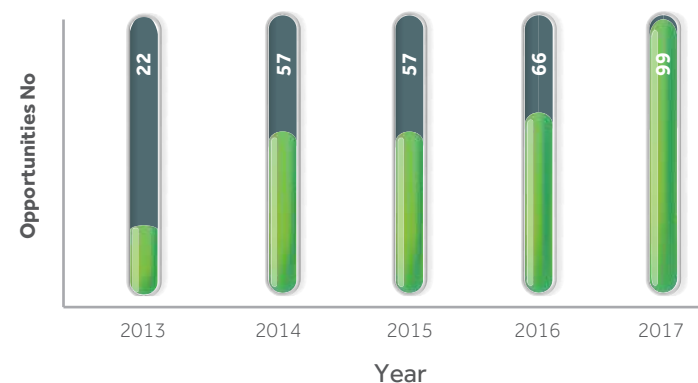
## ■ Investment Opportunities are handled as following:

- Projects with available feasibility study and investors, AAAID then evaluates the feasibility study.
- Investment opportunities requiring development for which AAAID prepares and evaluates a feasibility study.
- Established projects that require finance for the expansion and/or rehabilitation whereby AAAID evaluates the project and prepares the required studies.

## ■ Studies activities in the period 2013-2017:

- Studies activity include projects opportunity identified during AAAID visits to Arab countries, in addition to preparation of preliminary and detailed feasibility studies, preparation of restructuring and rehabilitation studies for existing companies that prepared by AAAID experts or outsource consultancy firms.
- The field visits conducted to the member Arab countries such as Saudi Arabia, Tunisia, Algeria, Morocco, Mauritania, Egypt, United Arab Emirates, Oman, Kuwait, Qatar, Bahrain, Jordan and Sudan resulted in exploration and identification of a number of new investment opportunities that contributed to preparation and evaluation of feasibility studies for different projects.
- During the period 2013-2017, the number of the investment feasibility studies evaluated/ prepared by AAAID have increase significantly to reach 99 projects.
- During the same period, AAAID'S Board of directors approved 26 projects in various sectors.
- During the same period, AAAID introduced new investment strategy by investing in private equity funds e.g. the Tunisia Aquaculture Fund.

**The following graph shows the evolution of the studies activity from 2013 to 2017:**





## Development

### ■ Objectives:

- Planning and execution of development program projects that aim at creating agricultural, environmental and social development. These programs target geographical areas or a segment of farmers, specifically small-scale farmers in a selected member state or region.
- Conducting applied agricultural research in various productive environments to adopt best practices in agriculture that are appropriate to each region.
- Development of modern agricultural technologies to serve the program's developmental purposes or technologies that AAAID contributes.
- Transfer of required technologies for application in AAAID's strategic projects and transfer of imported or internally developed technologies to small-scale farmers, producers and the private sector.

### ■ Development Activity Tasks:

- 1- Supervision of the preparation of agricultural development programs that AAAID can possibly contribute in and specifying the program's target segments and regions.
- 2- Participating in setting the required policies to attract national, regional and international organizations and institutions that are relevant related to AAAID's development programs, particularly strategic projects and supervision of all the phases related to planning, execution and evaluation of development programs.
- 3- Supervision in setting annual applied agricultural research plans to meet the requirements of AAAID's companies, development projects and programs in which it contributes.
- 4- Supervision of the implementation of cooperation protocols between AAAID and national, regional and international agricultural research centers.
- 5- Supervision of the setting and implementation of agricultural technology transfer plans and their mobilization in AAAID development projects as well as the supervision of the work of AAAID's agricultural research stations.

- 6- Participation in defining and securing the funding needs of development projects implemented by AAAID as well as the supervision of setting and implementing plans and programs that will achieve the Trust Fund's goals.
- 7- Preparation and implementation of the graduates training programs on the basis of sound agricultural and modern agricultural technologies.

### ■ Applied Agricultural Research:

#### Applying Scientific Research to Serve Agricultural Investment:

- Research programs implemented by AAAID are characterized by an innovative methodology that has reduced the gap between researchers and investors and linked between research results and their field application. This is done through updating research stations in investment project sites according to the climate to link between the investor's needs and the researcher's expectations. This approach is distinguished by implementing field experiments with an applied aspect to the results of agricultural research and deducting varieties and modified seeds that are appropriate to the target area.
- The idea of establishing research stations on agricultural project sites is based on conducting expanded field experiments this has created a large impact in the adoption of an integrated technological package for promising harvests suitable to the selected region's environmental conditions.

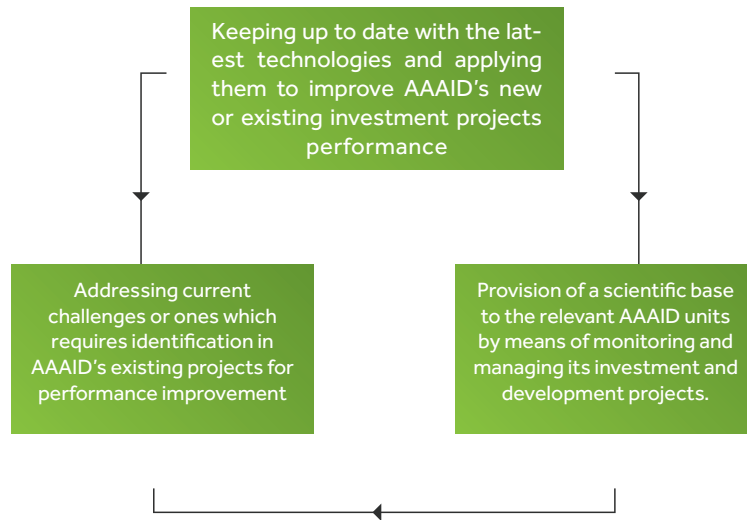
### ■ Goals of Applied Research:

- 1- To link between scientific research and technological development.
- 2- To apply the concept of expanded field research in serving agricultural development.
- 3- To apply the concept of the pioneer farm prior to the commercial production stage of agricultural projects.
- 4- To upgrade research stations in investment projects in AAAID companies to fulfill their technical requirements in aspects related to prevention of technical challenges as well as for development purposes.
- 5- With this approach, AAAID has distinguished itself with field experiment that applies applied agricultural research and has succeeded in linking between research outcomes and their application in agricultural investments.

## ■ Main Themes for Research Activity

- Implementation of applied agricultural researches
- Adoption and dissemination of modern agricultural technologies
- Capacity Building and preparation of human resources

## ■ Guidelines of Research Activity



## ■ Research Activity Work Mechanism :

### 1- Providing the scientific and technical support to serve AAAID's investment projects through:

- Application of technical and technological developments and securing their transfer and adoption mechanisms in established agricultural projects.
- Adoption of applied agricultural research with the purpose of transforming them to investment projects in the Arab countries.



### 2- Adoption of applied agricultural research with the purpose of transforming them to investment projects in the Arab countries.

- AAAID receives requests from authorities, institutions, organizations and government bodies in the Arab world for contribution in the support of expanded applied agricultural research or development programs.
- Management studies and analyses the request to determine the extent of its alignment with AAAID's agricultural vision and recommend its contribution, defining the role and implementation monitoring mechanisms.

### 3- Enhancing cooperation between research stations and Arab and international Universities:

- Management works to establish cooperation and coordination bridges with Arab and foreign scientists in universities and research centers and forming national specialized teams to serve AAAID's activities and programs.

### 4- Keeping up to date with technical and technological programs to develop them as investment projects or use them in the development of agricultural investments:

- To activate a number of technical and technological developments with the purpose of utilizing them in AAAID's existing or new investment activities to become leading agricultural investment models in the Arab world or to explore them as investment opportunities. This is done through the preparation of studies, attending and organizing events are activities such as conferences, workshops and exhibitions and forming national teams of specialized and distinguished scientists from all fields.

### 5- Preparation and Training of Agricultural staff

- The preparation of agricultural cadres that can keep up with modern agriculture through reviewing modern technologies and agricultural systems that AAAID has adopted in its investee companies.
- Expanding the sphere of benefit of AAAID's influence and achievements in improving Arab agriculture and contributing to the achievement of Arab food security.

### 6- Scientific Dissemination aimed towards serving agricultural investments

- Publishing brochures, evidence and introductory and investment circulars on the various food security harvests on a periodical basis.
- Publishing implemented program and activity results in several research stations in various Arab countries.

■ **Research activities achieved during the period 2013-2017**

In line with AAAID’s new strategic directives 2014-2018, the Applied Research Unit has implemented the support and implementation of several programs and activities in 2015 in a number of Arab countries. This has been with purpose of contributing to the agricultural development in those countries and attaining Arab food security. These activities are as follows:

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE REPUBLIC OF SUDAN</b>	Arab Company for Crop Production (Atbara)	An applied research experiment for the cultivation of maize crop.	Improving maize crop harvests as a main food crop in Sudan.
	Arab Sudanese seeds company (sinnar Station)	Implementation of an investment research program to propagate Soya Bean seeds.	Improving production and productivity.
	Arab Sudanese seeds company (sinnar Station)	Implementation of an investment research program to propagate rice seeds.	Improving production and productivity.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the cultivation of maize crop and processing it as (Silage).	Success of Maize cultivation in marginal lands.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the Reclamation of Saline Lands.	Improving the properties of saline soil in the (Abaqier) area through the addition of agricultural gypsum and poultry waste.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the producing and manufacturing Silage.	Production of silage as feed for domestic calves.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the cultivation of Laredo crop varieties.	The possibility of growing LARIDO grass in Sudan, and adapting the variety to the Sudanese environment.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the cultivation of Panikum crop varieties.	The possibility of growing Panikum grass in Sudan, and adapting the variety to the Sudanese environment.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the cultivation of Brazilian Beans and Begun Pea crops.	Improving production and productivity.
	Arab Company for Production and Agricultural Processing - Dairy Unit	An applied research experiment for the cultivation of Mung Bean Crop.	Improving production and productivity.
	Arab Company for Production and Agricultural Processing - Dairy Unit	Capacity Building program.	Training a number of agricultural graduates on the utilization of agricultural waste and processing as animal feed of great nutritional value.

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE REPUBLIC OF COMOROS</b>	Tissue Culture Lab (Moroni)	An applied research experiment to adapt banana seedlings and propagated in the nursery.	Improving production and productivity.
	Bandasemlini Research Station	Production and propagation of Taro inside the histological laboratory.	Improving production and productivity.
	Bandasemlini Research Station	External propagation of the Taro and Potato crops and monitor their growth.	Identify appropriate variety.
	Bandasemlini Research Station	Experiment to test different varieties of traditional vegetable crops in open fields.	Identify optimal dates and appropriate variety.
	Bandasemlini Research Station	Experiment of testing the cultivation of Potato varieties in the open fields.	Test the cultivation of Potato in the open fields.
	Bandasemlini Research Station	Experiment of testing the cultivation of Sweet Potato varieties in open fields under drip irrigation system.	Test the cultivation of Sweet Potato under drip irrigation.
	Bandasemlini Research Station	Experiment of testing of cabbage varieties.	Identify optimal dates and appropriate variety.
	Anjouan Center	Experiment of testing Pineapple seeds varieties.	Improving production and productivity.
Anjouan Center	Developing agricultural processes and rehabilitating the capacities of small farmers.	Providing farmers with advanced agricultural methods to increase productivity.	

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE ISLAMIC REPUBLIC OF MAURITANIA</b>	Dar Al Baraka Research Station (Rosso)	Implementing a number of applied research experiments to test varieties of field and vegetable crops.	Superiority of some varieties in terms of productivity and adaptation to the Mauritanian environment.

**Figure (2): Evolution of the implementation of Research Programs and Activities during 2013-2017**





## Development Programs

### ■ Goals:

- Reinforcement of Arab food security through the planning and implementation of programs and activities that aim at increasing production and productivity of the traditional agricultural sector. This is achieved through the support of income generating or income increasing activities through contribution in availing funding in the form of small revolving loans to low-income small-scale producer segments and providing selected production services in target communities.
- Since 2006, the development programs have implemented several activities in Yemen, Mauritania and the Comoro Islands as well as in the Occupied Lands to support the people of Palestine in coordination with international organizations. Activities conducted in the member states in most need of development can be summarized by country

### ■ Development Program Implementation Mechanism:

- 1- Defining target segments and conducting studies and preliminary surveys for planned activities.
- 2- Preparation of planned project proposals.
- 3- Funding of activities after receiving the required guarantees and concluding agreements.
- 4- Direct supervision of project execution from start to end
- 5- Contracting Training companies and field supervision to ensure sustainability of activities.
- 6- Regular monitoring of established activities to avoid obstacles and ensure the flow of work.
- 7- Preparation of evaluation studies and reports to identify the economic and social impacts resulting from the executed project.

### ■ Works achieved during the period 2013-2017:

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE ISLAMIC REPUBLIC OF MAURITANIA</b>	Roso	Implementing 3 projects (vegetable production, fish trade, fattening livestock) in partnership with the Mauritanian Lending Agency.	74 associations (small producer groups) have benefited from the activity.
	Roso	The irrigated Vegetables project.	The project benefited 4 cooperatives consisting of 80 small farmers.
	Roso	The irrigated Fodder project.	The project benefited 6 cooperatives consisting of 180 small farmers.
	Roso	A \$ 2 million financing line for the Mauritanian People's Funds Network.	The funding line benefited 1751 households representing 5253 beneficiaries.

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE REPUBLIC OF COMOROS</b>	Anjouan	A fishing boat project for small fishermen.	Financing 10 fishing boats at a cost of \$ 82,000 The project benefited 10 small fishermen representing 50 beneficiaries.

COUNTRY	LOCATION	PROGRAM/ ACTIVITY	OUTCOMES
<b>PALESTINE</b>	Anjouan	Approval of 5 Development Projects through the Aqsa Fund at a cost of 8.1 million USD.	Completion of Studies and Preliminary Surveys.

COUNTRY	PROGRAM/ ACTIVITY	OUTCOMES
<b>THE HASHEMITE KINGDOM OF JORDAN</b>	A \$ 2 million financing line to implement development projects for small farmers and producers.	The project benefited 330 households in 22 locations in the Jordan.

■ **Development Programs Executed through the Revolving & Trust Fund:**

**Background:**

AAAID continued its efforts to meet the requirements of sustainable development through the implementation of development programs that aimed to support agricultural activity (both vegetative and animal) through the planning and implementation of projects and programs to enhance food security.

**Total Capital Fund:**

Revolving Fund's: 2,000,000 USD.

Trust Fund's: 1,350,000 USD.

**Trust Fund's :**

AAAID's Trust Fund was established to empower low-income groups as an initiative to alleviate poverty through ownership of production channels by small-scale producers to increase their income. Further, the Fund supports basic services and utilities to low-income areas, which is an endeavor that is aligned with AAAID's directives to stimulate its agricultural development role.

**Shareholders:**

AAAID	500,000 USD
Ministry of Finance and National Economy	350,000 USD
National Social Security Fund	250,000 USD
Savings and Social Development Bank	100,000 USD
Kenana Sugar Company	100,000 USD
Others	50,000 USD
Total	1,350,000 USD

The fund works in implementing its programs within a framework that focuses on planning, implementation and in direct monitoring with target groups and in cooperation with institutions, banks, volunteering organizations that work in parallel or complement AAAID'S work such as:

- Funding of agricultural activities through the provision of agricultural production inputs.
- Support of animal breeding activities.
- Contribution to support of basic services such as education, health and provision of healthy water.

■ **The Trust Fund's Objectives:**

The Fund aims to provide an integrated package of community and technical services to serve the needs of low-income segments and small-scale producers. These are represented by the support of income-generating activities as a poverty eradication tool and to ensure the sustainability of community facilities through:

- Provision of the required finance for low-income groups, especially women, small-scale producers and pensioners through revolving finance of production activities.
- Provision of community services including education, health, education and particularly drinking water.
- Capacity building of institutions that support the small and medium enterprise sector.

■ **Intervention Methodology:**

- 1- Gathering of basic information to assess the current situation of the target segments and analyzing their problems for programs that are in line with the Fund's objectives.
- 2- Conducting a social survey to gather basic information of the socio economic status of the target segments in intervention areas.
- 3- Analysis of the current social and economic livelihoods and the quality of community services including schools, health, the health of the environment and availability of drinking water.
- 4- Selection of suitable locations for the implementation of programs as per specific criteria and conditions.
- 5- Provision of proposed packages.
- 6- Suggestion of an implementation, monitoring and management mechanism.
- 7- Implementation of the program according to the nature of the selected activity and in the manner that suits the grant or concessional loan to a commercial loan with a nominal management margin.
- 8- Management approval after the study and approval of the proposed Trust Fund's Facilitation Committee that is presented by the Secretary of The Committee and finally present the recommendations to the AAAID President.

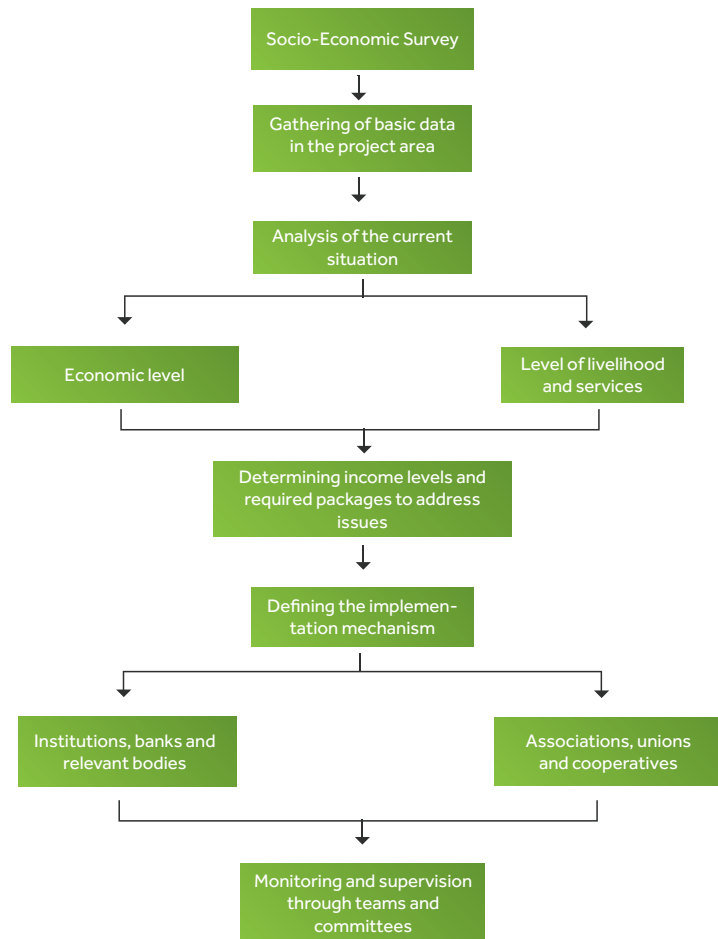


Figure (3) Trust Fund Work Mechanism (The Methodology)

### ■ Intervention Area Selection Process:

The intervention area is selected based on the following criteria:

- The area is a remote, rural area with promising potential.
- The necessity of defining the type of required intervention by the beneficiaries themselves are aligned with the Fund's conditions and objectives.
- With the exception of small revolving loans directed towards income generation for small families, other projects should create positive social impact.

### ■ Trust Fund Programme Implementation Mechanism:

Collaboration with funding institutions and related bodies:

- In the context of the successful implementation of its projects and increase the effectiveness of its resources, the Fund has reached outlining agreements with several relevant institutions such as the Savings Bank, The Social Development Fund, The General Pensioners' Fund and The Social Security Fund in Sudan.
- The Fund has also collaborated with Charity Organisations such as Suqia and Maarif, which specialize in the field of water provision for animals and people in water-scarce regions. This collaboration is in the form of well-digging, concrete ground tanks in areas where small-scale producers and shepherd gatherings exist.
- The Fund has also concluded agreements with some unions and production associations to activate their resources for facilitation of monitoring and supervision of implemented programs.

### ■ Collaboration with Production Associations, Unions and Civil Society entities:

- Implementation is performed directly with target groups and community leaders such as sheikhs, mayors, tribal chiefs etc to engage these heads in supervision and providing the necessary guarantees.
- The signing of agreements with associations and productive associations of small productive farmers (17 productive societies) in the Al-Jazeera state, in addition to the 3 agricultural associations in the areas of rain fed farming in South Kordofan and White Nile State.
- Signing of agreements between associations and small-scale producers governs the production relations.
- Implementation is done according to the agreed format.

■ **In case implementation is done according to Al Murabaha, the Fund does the following:**

Provision of production inputs such as seeds, fertilizers and pesticides and other services from land preparation to harvesting. The Fund utilizes a final contracting formula ending in Murabaha after which the service is sold to the beneficiaries.



**(Plant Sector)**

Close follow-up and complete supervision by the Fund of all production phases.



**Animal Sector**

Purchase of herds and their requirements such as veterinary medicines and fodder and linking sheperds to the funding market and availing veterinary expert to closely monitor and supervise the herds.

■ **Cooperation with Institutions, Organisations and Banks**

- Signing of an agreement with Suqia Charity Organisation to manage AAAID's digging unit.
- Signing of an agreement with Maarif Charity Organisation for the establishment and implementation of concrete floor tanks to provide water for humans and animals in water scarce areas.



■ **Development activities and work achieved during the period 2013-2017:**

**Direct Activities:**

Number of Pensioners	Number of Families	Type of Activity	Area	State
360	60	Support of small-scale farmers/animal production	Alaqah/Tandlati Province	White Nile State
24,438	4,073	Support of small-scale farmers/crop production	Ray Gaboja, AlGalee, East Tayba, Ray Al Shawal, Ray Al Matory.	Gezira State
9,234	1,539	Support pensioners families	Kosti, Medani, Gadarif, Dongla, Atbara	States of White Nile, Gezira, Gadarif, Shemalia, Nile River
900	150	Support Rural Women	Al Goz	South Kordofan State
<b>34,932</b>	<b>5,822</b>	<b>Total</b>		

**Community Services:**

Beneficiary	Type of Facility	Area	State
Local Community/Social Service	School Rehabilitation (Education)	Danagla	Gezira State
Local Community/Social Service	School Rehabilitation (Education)	Abu Haraz	Gezira State
Local Community/Social Service	Water Network (Water)	Eid Al Waleed	Sennar
Local Community/Social Service	Teacher's Accommodation (Education)	Damazin	Blue Nile State
Local Community/Social Service	Electricity Connection	Karaib	Khartoum
Local Community/Social Service	Provision of Class Seats (Education)	Ghabsha	North Kordofan
Local Community/Social Service	Well-digging (Water Harvest)	Umm Rawaba	North Kordofan
Local Community/Social Service	Establishment of a Ground Cement Dam	Khawy /Neblet Locality	West Kordofan

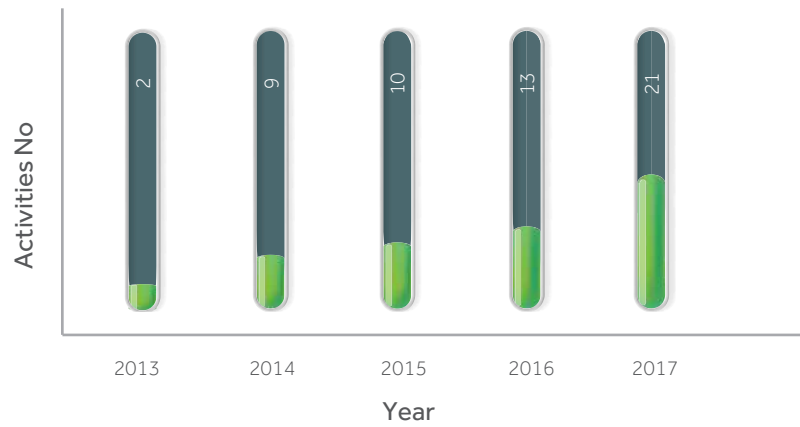


Figure (3): Evolution of the implementation of Development Programs and Activities during 2013-2017

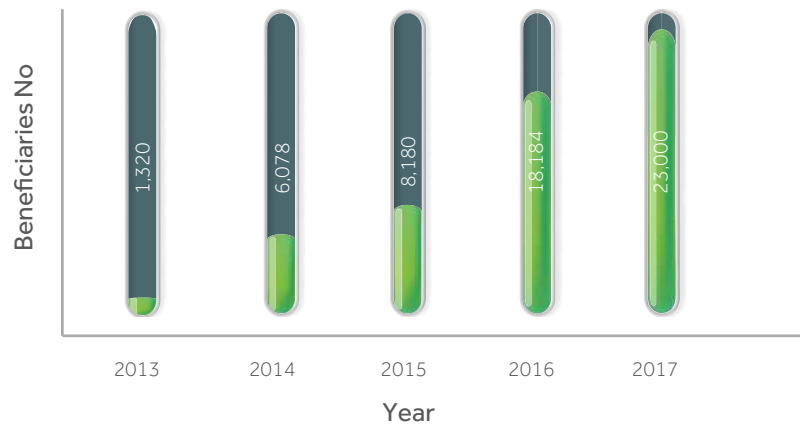
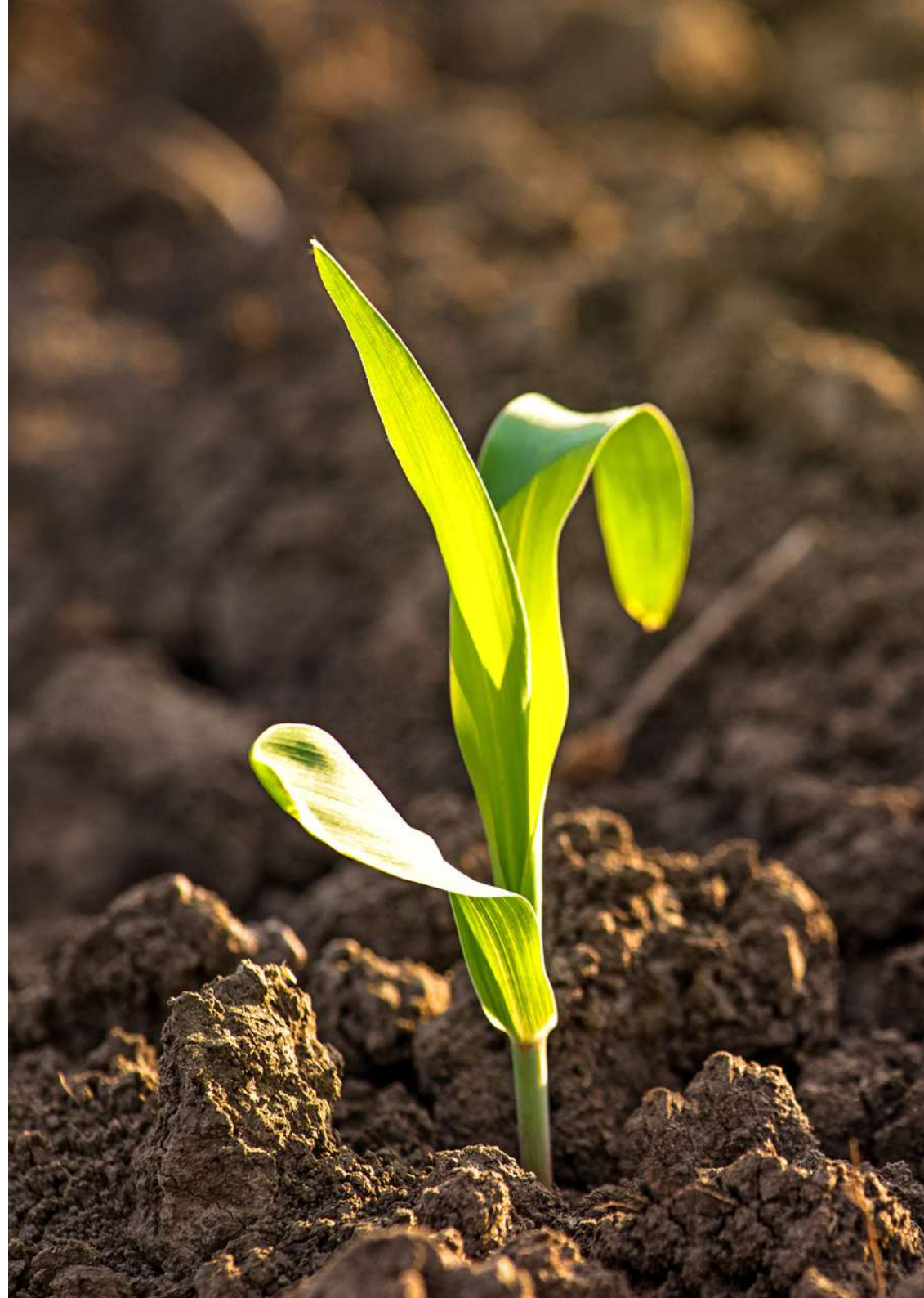


Figure (4) Total number of beneficiaries of Development Programs and Activities during the period 2013-2017





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للإستثمار والإنماء الزراعي

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