
CHAPTER 7

“SAWAH” EMPOWERMENT

This chapter looks at how farmers are empowered through organization and equipping them with information on modern rice production methods under the “sawah” system (formation of farmer-groups, on-the-job capacity building, organization of field days/farm tours/meetings) with the broad objective of empowering them economically and financially.



There is the need to identify communities with potential for rice cultivation



A welcome reception into a community. Such warm receptions make technology acceptance transfer easier and at a faster adoption rate.



Explaining to opinion leaders the need for the adoption of modern rice production methods (Sawah Eco-technology) that can increase productivity and empower them economically



Thorough discussion with identified communities on “sawah” system development and roles needed to be played by each (farmer groups, extension and scientists)



An expert explains to the community about “sawah” system. Such basic understanding between scientist and farmers facilitates technology transfer with faster impact on communities.



Exchange of ideas as community members ask to know more about “sawah” system and the advantages/benefits that the technology provides to farmers through empowering them economically.



A community that has adopted “Sawah” under the Fadama Project in Nigeria and have testified to the economic benefits of Sawah Eco-technology



Women play a major role in creating the foot basket for the family. They should be involved in all discussion and technology transfer activities.



Land problems are critical in West Africa and chiefs/traditional rulers are the custodians of most lands. They need to be consulted and request for their permission, assistance and co-operation



Small surveys to know the background of potential farmers. Farmers also need to be educated and assisted to secure documented land tenancy agreements for longer periods in order to guarantee land use for technology acceptance and adoption



Land owners should be made to agree on terms of land leases through tenancy agreements which must be signed (signature/thumbprint) by land owners or their representatives

LAND AGREEMENT

THIS IS A RENT AGREEMENT FOR A PARCEL OF INLAND VALLEY SITUATE
 AT WAAWA ON Asinikrom
 AT Asinikrom TOWNSHIP IN THE
 STOOL/FAMILY LAND NEAR Asinikrom DISTRICT OF THE ASHANTI REGION OF
Asinikrom DISTRICT OF THE ASHANTI REGION OF
 GHANA, RELEASED FOR THE DEVELOPMENT OF INFRASTRUCTURE AND
 IMPROVED TECHNOLOGIES FOR RICE PRODUCTION FOR RICE FARMERS.

The agreement is for a period of ten (10) years covering an area of Three (3) acres and
 starting from the year 2010 cropping season. The lowland provided by the landowner (name
 indicated below) to the rice farmer (name indicated below) is to be used mainly for crop
 production over the agreed period. The farmer has therefore undertaken to pay an
 annual amount of
 (GHC.....) or an equivalent in kind being
THREE (3) TONS MILLED RICE to the landowner as rent. This rent agreement may
 be reviewed only after the expiry of the agreed period.

Landowner:
 Name Simon Kwame Owusu
 Sign. [Signature]
 Date 20 APRIL 2010

Farmer:
 Name MUSA
 Sign. [Signature]
 Date 20th APRIL 2010

Witness
 Name Mr. Kwame Agyemang
 Sign. [Signature]
 Date 20th APRIL 2010

Witness
 Name NATHAN
 Sign. [Signature]
 Date 20th APRIL 2010

A copy of a land tenancy agreement signed by the land owner



During the initial stages, farmer-groups need to be assisted with some basic tools



A village market where common and basic tools are available and assisting poor resource farmers to acquire such tools may be necessary.



The power tiller is a basic machine which is very essential for effective land preparation. Such smaller and less costly machines are preferred to heavier machinery which have high maintenance cost and are also not good for our soils.



Unveiling a new power tiller that has just been introduced to farmers in a local community in Nigeria.



Locally manufactured machines (by NCAM in Nigeria) mounted with a PTO for bund construction, promotes mechanisation.



Farmers/farmer-groups should be supported partially (e.g. credit facilities) with such machinery to empower them to produce more under improved conditions



To empower farmers to adopt modern farming methods and techniques, training on the use of introduced machinery is necessary. Training a farmer on how to operate power tiller.



A power tiller operator testing his driving skills as the machine is mounted with a trailer



Demonstrating the use of farm machinery to farmers



Testing the effectiveness and efficiency of the machine for bund construction to ease the burden on farmers of manual construction



Training the trainers (field technical staff from Togo and Benin) on Land preparation in Ghana



On-the-job training for field staff from Togo and Benin in Ghana



Training in the art of producing a fine micro-environment very conducive for rice growth



Women should not be left out in the training program for training the trainer For easy and effective technology transfer.



Farmers should be trained on not only good bund construction but also effective water management (control). A scene from Nigeria.



Empowering and encouraging farmers to become economically independent. A farmer group after a training session in Ghana



Farmers communicate easier and faster amongst themselves. Farmer-to -farmer “sawah” technology transfer is very effective as observed in Ghana.



Leveling plays a very important role in crop establishment and growth. Leveled fields provide effective water and nutrient management. A training session on field levelling in Ghana



Effective land preparation creates a very conducive environment for rice growth.
A training session in Ghana, for young scientists from Nigeria



On-the-job “sawah” eco-technology training including PhD program at the National Centre for Agricultural Mechanization (NCAM) in Nigeria



The use of local materials (soil and wooden) to construct weirs/dyks through farmers' self-support for affordability and sustainability is encouraged under Sawah



On-The-Job training: "Sawah", Fadama /ADP staff and farmers in Nigeria. Such groups have started enjoying the benefits of sawah eco-technology.



Farmers day organized for farmers to observe and see for themselves yields obtained and the necessary steps to follow in the “sawah” system in Ebonyi state of Nigeria



A farmers day at Zaria, Nigeria. Farmers testify to obtaining record high yields under sawah compared to traditional methods.



Families get excited and feel empowered as 'Sawah' rice fields record exceptionally high yields



Scientists working to improve rice production through innovative research and development on "sawah" in Nigeria hold a workshop on the forward.



Training and discussion session for farmers to empower them with information on modern rice production methods (Sawah Eco-technology)



A field day for all stakeholders: farmers, scientists, policy makers, field technical and the media on “sawah” in a state in Nigeria



The press interview an expert in ecological engineering (Prof. Wakatsuki) to know more about “sawah” in Nigeria and to assist in information dissemination for the benefit of farmers.



Communication is very important in technology transfer. An extension staff talks to colleagues and farmers during training in the field



Lessons on water harvesting techniques for young scientists by Prof. Wakatsuki, in Nigeria.



Transporting farmers to observe improved production methods is one form of empowerment. Farmers who have heard about “sawah” but yet to start adopting undertake a field tour of Sawah sites



A field tour for participants from different countries who attended the 1st international workshop on the “sawah” technology organized in Ghana



Small pump based Oasis type “sawah” development in a savanna flood plain produced paddy yield of over 7.0 t ha^{-1} at Jega, Kebbi state in Nigeria



On-the-job training has expanded to the staff of Africa Rice, Togo and Benin on various skills of “sawah” eco-technology (Afari, Ghana, Nov.2011)



Leading farmers at Afari, Kumasi, Ghana could develop more than 10ha of new “sawah” fields within 2 years using one power tiller and could produce more than 40 ton of paddy per year (Nov. 2011, Excursion at the 1st International “Sawah” workshop)



A Press interview with head of Nigerian team during a field tour for participants from different countries who attended the 1st international conference on the “sawah” eco-technology organized in Ghana



With higher paddy yields, economic returns are better as income of Sawah rice farmers is improved.



Stake holders feel and share thoughts and satisfaction among themselves as they tour “sawah” fields in Ghana during the 1st International workshop field excursion



Nutrient management (particularly mineral fertilizer use) is critical for good yields. A field tour for farmers to observe different nutrient management options which will help them to maximize yields through efficient fertilizer use.



A field day for farmers to compare crop performance under the improved system (“sawah”) with the traditional method (non-“sawah”) in Bida, Nigeria



Farmer to farmer empowerment. Mr. Adu Tawiah (a leading “sawah” farmer in Ghana) trained another farmer to develop 3ha of “sawah” using small spring water source. Only local farmers know such water sources.



“Sawah” fields look attractive with good crop growth, an indication of better/higher yields that will provide higher income and better living conditions.



“Sawah” fields can produce several tons of paddy per ha depending on the variety. Higher yields and good markets economically empowers farmers.



Harvesting under improved condition for good quality rice, good markets and higher Revenue/income



With good yields, farmers are empowered to produce and process under improved conditions for high quality grain.



In the rural areas, milling process is not only improved to provide quality grain with a higher market value, but by-products (husks, etc.) are used to generate extra income (sold to animal farmers) of rice farmers.