



*Smallholder Empowerment & Economic Growth
Through Agribusiness & Association Development
(SEEGAAD)*

Quarterly Report

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Report No. 2



The Raft method of farming seaweed is being promoted as a method of preserving seed stock when it is threatened by high water temperatures or low salinity, Tanga Region, Tanzania

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Background – The Project

Seegaad as originally designed anticipated a range of activities in the Coastal Districts of the Tanga Region, with seaweed playing a leading role. However after the project started it quickly became apparent that other suggested activities offered neither the income potential nor the opportunity to near the number of persons that seaweed farming presents.

In addition, the seaweed activities are very complimentary to the USAID supported activities of the Tanzania Coastal Management Partnership (TCMP) project. As part of TCMP activities the Government has adopted the “Tanzania Mariculture Guidelines”. These guidelines for investment in the Tanzanian mariculture industry place an emphasis on the role of local communities in the protection and utilization of their marine resources. An essential element for the effective protection is for the local community to have a significant stake in the resource utilization (whether it is for seaweed farming, sustainable mangrove harvesting, tourism or other commercial activities). Seaweed farming, an environmentally friendly activity, provides producers with a strong incentive to protect the marine resources under the jurisdiction of their village.

In villages where seaweed can be successfully grown, it provides a very significant income opportunity. Generally there are far more people who are interested in growing the seaweed than can be supplied, with materials needed for production, by the developers.

In the Tanga Region the persons most interested in seaweed production are married women, whose husbands primarily are fishermen. For these families the sea is the primary source of cash, with agriculture relegated to a more subsistence role.

There are 33 villages in the region considered to have reasonably good potential for seaweed production. While one developer is actively trying to expand production in the Region, the other is emphasizing expansion along the Southern Coastline, and is currently not interested in putting significant additional investment into the Region.

Background - Spinosum

The seaweed industry has been slowly growing in Tanzania since its introduction in 1989. To date, this development has occurred with very little assistance from Government or from donors.

For one variety of seaweed, spinosum, Tanzania now produces close to 30% of the world supply. Unfortunately the market for spinosum is relatively small and spinosum is quite easy to grow and therefore has a relatively low price.

While Tanzanian farmers are willing to produce more spinosum, any significant increases in production would most likely result in lower beach prices and less income overall to producers and the country. Also 90% of the market for spinosum is for use in toothpaste where the market is only growing at about 3% per year.

Therefore the SEEGAAD project will not work to increase production of spinosum but will work with producers and developers to improve quality and thereby strengthen Tanzania's position in the spinosum market.

Background - Cottonii

Tanzania has been producing the cottonii variety of seaweed for about 8 years now. While the Tanga Region beach price is almost triple the price of spinosum, Tanzanian production is still hovering around 1000 tons per year. During the cooler months of the year cottonii grows almost equally as well as spinosum. However at higher water temperatures and during extended periods of heavy rain it is subject to die off problems.

The result is that growers and developers in the Tanga Region have now come to the conclusion that cottonii must be treated more like an annual crop. Thus, significant attention must be paid to retention of large quantities of seed stock in areas where it tends to survive year round. A corollary to that is that growers that go to the extra effort to retain seed stock must receive some additional rewards for their efforts.

As cottonii production is potentially much more profitable for the producers and has a much stronger market, the SEEGAAD project will initially work with the cottonii industry to find ways to expand production, improve quality, and overcome die off problems.

Background - The work

The general approach to the work is that the Seegaad project will work with the industry as a whole. However, work during 2003 also includes activities with producers in the Tanga Region focusing on a range of problems and issues requiring attention. Our approach is to seek and test practical changes that will improve the profitability of the cottonii industry. For those changes proven successful in the Tanga Region we will work to extend the changes to additional areas in 2004.

We note that some problems, such as the die off problems for cottonii, may be somewhat reduced by adopting different practices, however the most desirable long range solution requires the development of greater plant hardiness. We are also proposing to make a very modest start in this direction by supporting the importation and hardiness testing of additional strains of cottonii.

It is expected that, with the lessons learned in the Tanga Region in 2003, expansion of activities to the Southern Coastline in 2004 may prove appropriate. The Southern

Coastline is considered to have greater overall production potential for cottonii than either the Tanga Region or the coastlines of Zanzibar and Pemba.

Seegaad work has been designed to assist developers and producers to find practical solutions to the problems they face as they seek to rapidly expand the cottonii industry from its current level of around 1,000 tons per year.

2nd QUARTER PROGRESS

At the end of this quarter a draft work plan was submitted for comments to USAID and others with a stake in the development of the Tanzanian seaweed industry. The following is a report on the activities proposed in the work plan and the work undertaken on each during the quarter.

Activity 1: Draft and sign a memorandum of understanding MOU

A MOU was prepared and sent out for comments among all of the proposed partners, namely:

ACDI/VOCA,
Kingsway,
Zascol,
Tanzania Coastal Management Partnership (TCMP), and
USAID.

An amended MOU was then prepared and is now awaiting approval from USAID, other proposed partners, with the exception of FMC, (a USA company and the major buyer of seaweed produced in Tanzania) are expected to sign, once any changes resulting from the USAID legal review are completed. It is hoped that FMC will join at a later date. The MOU anticipates that whenever possible meetings will be scheduled to coincide with visits to Tanzania of representatives from FMC.

Activity 2: Seaweed Development Plan

At the first industry workshop held on 1 April there was a call to create a seaweed development plan, particularly for cottonii, the higher valued of the two commercial varieties of seaweed in Tanzania. At a smaller meeting on 9 June the proposed work plan for this project was presented and discussed among the proposed MOU participants. Work in the third quarter will include preparation of drafts on specific matters for consideration by the Mariculture Working Group and at a meeting second industry workshop planned for October.

Activity 3: Project Launching/Public Awareness

Activities to meet with and explain the project to, village, district, and regional officials were generally completed during the period. A poster explaining the seaweed industry was prepared for use in the Saba Saba and Nane Nane fairs, and will be used in future activities.

A project brochure will be prepared in the next quarter.

Activity 4: Prosperity Workshops

Proposals for conducting these workshops through PSI were prepared. Approvals to conduct the workshops from C-Weed and Zasco were received. They are anticipated to start in July with leadership workshops in each of the three coastal districts. These will be followed by prosperity workshops for cottonii producers, in each of the six villages where cottonii is currently cultivated.

Activity 5: Regular meetings with producers

This activity is planned as a follow on to the prosperity workshops to introduce the producers to better understanding of the reasons behind the recommended production practices and to focus on preservation of sufficient seed stock for the start of each season.

Activity 6: Two-way exchange visits between best farmers

Both C-Weed and Zasco have endorsed this idea and have suggested participants. Further action is awaiting approval of this item in the work plan. These visits are expected to start in August.

Activity 7: Encourage expanded seed production

The initial development of the seaweed industry in Tanzania was as a perennial crop. This has proven to be the appropriate approach with regards to spinosum. However with regards to cottonii, die off problems in many areas, have made production of cottonii on a year round basis impossible.

The result has been that, at the beginning of the prime growing season, June to December, there is an extreme shortage of seed stock. Thus many producers must spend the first couple of months bulking up small quantities of seed stock to reach production levels. It is equivalent to a maize farmer first planting for seed, then after harvesting the seed, replanting it for maize to eat. The practice is highly inefficient and results in far less production per producer than should be expected. Producers themselves get discouraged, as the seasonal returns are too short lived.

The first approach of the project has been to get the industry to focus on the problem and on possible ways of mitigating the problem including:

- Explaining to farmers how their incomes can be significantly improved if they buy (or start with) sufficient seed stock at the beginning of the season.
- Encouraging farmers in areas where cottonii grows year round to grow and sell seed stock as a business. (At a 50% premium to beach prices)
- Working with developers to plan for sufficient seed stock in the future.
- Working with producers to find ways of minimizing die off problems, such as moving the seaweed to deeper water or different areas during critical times.

Activity 8: Encourage input availability

For each 20 meter line of seaweed, that a cottonii farmer is tending, they should be earning a minimum of Tsh1,000/= (US\$1) every six weeks. In the Tanga region, in the past, many farmers have had only 10 - 30 lines. Developers have now recognized that producers with too few lines are easily discouraged and are not

committed farmers. On the Southern coastline, Zascal is now encouraging farmers to manage up to 105 lines.

In the Tanga region C-Weed has allocated some farmers up to 120 lines and the result in those villages is very positive. The income from that many lines makes the activity very attractive, changing the nature of seaweed farming to a primary income generating activity for the producer.

Activity 9: Quality Improvements

The general quality of seaweed from Tanzania appears to be quite acceptable to the market. However, at times, it has been quite inconsistent. Tanzania is in position to provide the market with excellent quality seaweed. This is especially true as it relates to the system whereby developers are granted concessions to develop the industry in specific villages. As the developer is the only buyer in the village they are in the position to demand that it be dried and cleaned properly. Seegaad has been encouraging them to use the leverage that they have to improve quality.

Developers are working to improve quality, and one of the most important changes they are working on is to get producers to use drying racks, keeping the seaweed off the bare ground while it is drying. The higher and relatively good prices being paid for the seaweed and other schemes to provide producer groups with boats to transport the seaweed have created conditions in many villages where it is appropriate to insist that producers now adopt the use of drying racks.

Activity 10: Reduction of sea user conflicts

No activity planned during this quarter

Activity 11: Extension assistance

The project organized a workshop with Tanga Region Fisheries Department extension personnel to introduce the project and to explain more about seaweed. From that workshop it became clear that these persons have had little exposure to seaweed information. As a result of the workshop, additional copies of the FMC "Cottonii and Spinosum Cultivation Handbook have been ordered for these persons. It will be provided to them at a future meeting where the contents of the handbook will be introduced.

Seegaad provided sufficient bamboo and producers in three villages built 27 rafts so as to try out the raft method of production. In addition 100 bamboo seedlings, started before Seegaad began, were planted in seven villages, in an attempt to begin to make bamboo available in seaweed producing villages.

Activity 12: Strengthening producer organizations

Developers already use the existing seaweed producer committees in each village as a means of working with the producers there. The leadership workshops and prosperity workshops scheduled for the third quarter will build on the existing structure.

Activity 13: Formation of industry association

The industry presently consists of producers and four developers, only two of the developers work on the mainland. There is no urgent need for an association. But, there is a need for the developers to work together and with Government to create better conditions for dynamic growth of the industry. At every opportunity we have encouraged the developers to work together on areas of common interest, which they seem to be doing at present.

Activity 14: Research assistance

We have been in contact with Professor Yunis Mgaya at the University of Dar es Salaam Dean of Faculty of Aquatic Sciences and Technology and he is interested in working with us on the importation and hardiness testing of additional strains of cottonii. FMC has also provided us with additional quarantine information that will be useful in the application to import additional strains of cottonii for testing. Ultimately the strains will need to be hand carried to Tanzania, probably from the Philippines.

Activity 15: Provide market information

We have begun the process (using the internet and personal contacts) of finding sources of beach prices, factory gate prices, and carrageenan prices in other countries. This is a relatively difficult process in a tightly controlled market such as we find for spinosum and cottonii.

Activity 16: Agribusiness Services Development Fund

Primarily, this fund is expected to be used to develop a model for more rapid expansion of the industry. We have held generally positive talks with developers about a couple of potential uses. A detailed plan(s) are to be prepared during the third quarter for approval of developers and USAID.

Olaf Kula, ACIDI/VOCA's micro-enterprise development specialist assisted the project in the development of the work plan and in the development of a model for use of this fund.

Activity 17: Data Collection

George Bananuka and Mlongetcha Mkuku, from PSI, assisted Seegaad in the collection of baseline data and in preparation for the prosperity workshops. Detailed baseline data on all seaweed producing villages, including individual information on each producer was collected during the quarter.

An assessment to determine the exact amount of cottonii seed stock available in Tanga Region at the start of the production season was completed.

Activity 18: VOCA Volunteers

No activity planned or undertaken in this area during this quarter.

Activity 19: Agriculture

No significant agricultural activities are planned until 2004.

Other activities during the quarter:

Lugazo Zuberi, the project's seaweed development specialist, participated in a two-week mariculture workshop held in Morogoro in June.

Juzar Sachak was hired as office manager and business development specialist.