<< No. 28 >> April 1, 2002

AAINews

APPROPRIATE AGRICULTURE INTERNATIONAL CO., LTD

1-2-3-403 Haramachida, Machida, Tokyo, 194-0013 JAPAN. TEL/FAX: 042-725-6250 Email: aai@sk9.so-net.ne.jp

Incentives and Sustainability: a reflection in Syria

While training agricultural extension workers in Syria, I discovered that here it is a common practice to give some daily allowance to the participants in training courses as an "incentive". They explain the logic behind this practice that by offering money more people could be expected to attend and therefore the training would be more effective. However, it can also be said that by giving such incentives they are actually mobilizing participants. With such a low salary level for civil servants, it can be understood why this sort of incentive scheme works pretty well in Syria, but it seems that the practice of offering incentives is contributing to reducing the training to a meaningless formality. After all, trainees are expected to come mainly because of the offered allowance, and the course contents may merely be a secondary consideration for them. These days the concept of "participatory or community-based development" is gaining popularity, and sometimes similar problems to the incentive scheme are seen in the practice of such development activities. In order for participatory / community-based development to be successful, it is necessary to ensure the participation of the local community. However, in reality there are some cases where local communities are motivated and mobilized by financial incentives, rather than participating on a voluntary basis.

When seen positively, incentives may be taken as a necessary tool for achieving some results within a limited time period, and in many cases they are given to the participants to compensate for their labor and time, making the exercise a form of "employment". However, we should consider not only the short-term effect but also some long-term impacts of such incentives. Isn't it only for the project executor's convenience to use the rationale that incentives are necessary to achieve some results within a limited time period? While the project is on going there must be a certain budget attached to it, and thus it can keep providing financial incentives for local people. However, isn't there the possibility of establishing a no money/no participation relationship by the end of the project term? If that were to be the case, incentives for some visible short-term results may be counter-effective for the long-term sustainability of the project. It is understandable that it is necessary for the donor to be able to "assess" the result of each and every project achieved within a limited time period, as it is the donor who invests the manpower, funds and equipment for the project. However, it is highly questionable whether the sustainability of a project can be sacrificed for the sake of the project executor's "achievement".

Apart from the impact on the project's sustainability, there is another form of damage that so-called incentives can cause. Let me explain this by referring to one project focusing on tree plantation in Syria. The country is promoting tree plantation in order to increase the acreage of forested land (currently about 3% of the total territory), and for the plantation work local people are employed as labourers to perform participatory plantation activities. This also creates employment. This may appear ideal at first sight, but a problem has emerged in connection with this plantation work, namely forest fires. The fires can start due to somebody's carelessness, for example a person failing to put out a cigarette, but there seem to be some deliberate cases of arson. At the end of the plantation operation people lose their jobs, but if a fire then finishes the forest off, it leads to new employment. This makes the entire plantation activity meaningless.

What, then, can be done about such a situation? Finding a panacea may be rather difficult, but it would be an important factor for changing the situation to try to improve the contents of participatory projects of training courses and make them fit the needs of local communities and trainees. Besides, it is necessary on the project executors' part to work with a long-term perspective rather than just towards a short-term outcome.

(By KOTO in Syria, April 2000.)



Interview with local farmers



Lecture at a training center



Training course on drip irrigation system

- 1 -

Partnerships between ODA and NGOs: for more effective international co-operation (4)

Part 4: AAI and NGOs - Our project in Zimbabwe

It was in 1997 that we initiated preliminary research to prepare for our independent project in Zimbabwe. We started it off in Japan with information gathering on various NGO activities in English speaking countries in Africa. This was followed by two field visits in 1998 to select, among the ones identified during the preliminary research, those with whom we would like to work together in the future. During these field visits we applied the following criteria to the selection of a few local NGOs as potential partners.

- * That the nature of their project and targeted regions correspond with those of our potential project, and that the NGO is willing to get involved in a collaborative project with AAI;
- * That the NGO's field of focus is agricultural and rural development;
- * That its activities are field-based with a focus on sustainability, environmental conservation and community participation;
- * That it is a Community-Based Organization (CBO), undertaking grassroots operations in the rural communities.

These criteria can be summarized with a few keywords, such as "community participation", "appropriate technology", "small (or appropriate) scale", and "sustainability". In 1999, in order to understand their projects and intentions in more detail, we conducted another field visit and accompanied a few of the identified NGOs' staffers to see their daily activities.

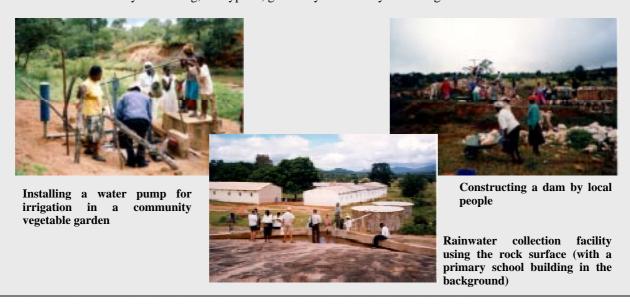
The NGOs we selected are mainly ones working on agroforestry and/or rural development. Let us introduce one of them:

[Zvishavane Water Project (ZWP)]

We selected this NGO as we found it has a small-scale set-up and was willing to collaborate. In addition, based on our previous experience, we highly appreciated the fact that ZWP is working on water harvesting (a method of collecting and utilizing rain water efficiently, developed in traditional agriculture in arid and semi-arid regions) as part of their project, and that their operation range is in semi-arid regions (belonging to Natural Region IV-V).

Aiming at the improvement of the living standards of the local communities in Zvishavane and Chivi regions in the south-central part of the country, ZWP is carrying out participatory activities for water harvesting and soil conservation in the area. The actual activities are undertaken by some ten staff members, and include the construction of small- or middle-size dams, support for community group gardens, small-scale irrigation, collection and utilization of rain water, fish farming, livestock rearing, and water and soil conservation. While trying to make the local community agricultural activities sustainable with the help of a rain water collection & utilization scheme and soil conservation, they are also interested in the traditional agricultural techniques developed and practiced in this semi-arid region over many years.

Established in 1987, ZWP has a solid base of activities initiated by progressive, hard-working farmers. In Zimbabwe there are many such farmers who have adopted innovative faming techniques since before independence. The group started making wells and dams within the region before developing to assume the present form of NGO. Partly because its operation range is not so large, the staff has constant and direct contact with local communities. It is a very interesting, but typical, genuinely community-based organization.



In the next issue we will introduce other NGOs we have identified for collaboration.

- 1 -

Saudi Arabia News (4)

Part 4: The Demonstration Project of Large-Scale Desert Greening by the Japan Petroleum Energy Center (PEC) (3)

In this issue we would like to report on some research undertaken for the third theme; development of greening technologies.

1. Greening technology development using symbiotic microbes:

This research project aims to develop technologies of: 1) segregational culture and growth fixation of rhizobium which have the function of fixing nitrogen from the air as a symbion of arid land vegetation, and of vesicular arbuscule (VA) mycorrhiza microbes which help in the absorption of phosphorus, minerals and water; 2) seeding of crops inoculating with such bacteria / microbes; and then 3) nurturing of healthy seedlings which have formed root nodules or mycorrhiza. At the same time it aims to establish a water-saving technology of partial water culture, which supplies nutrient water only to a certain part of the root. This water-saving farming technique may be used in combination with the above seedlings nurtured with microbes, depending on the environment and the potential of the particular locality. The project tries to work out site-specific cultivation methods taking into consideration the local environment.

2. Greening with the help of growth promotor:

It has been confirmed by pot experiments in Japan that by treating the root or some other parts of a plant body with low-concentration 5 Aminolevulinic Acid (5-ALA), the salt-resistance of some plant species can be increased, while the growth of roots can also be accelerated. Also, since this 5-ALA is a product of natural fermentation by microbes, it is more eco-friendly than chemically synthesised substances. It is expected that by introducing 5-ALA into the agricultural practices of Saudi Arabia, the greening process can also speed up, and greening and cultivation practices can be improved in the areas suffering from serious salt problems. Under this research project, 5-ALA is being applied to model plants such as cotton and other plants used for greening. During this pilot cultivation, the photosynthetic activity and nutrients of the target plants are observed and analyzed in order to collect sufficient data to work out the best concentration of 5-ALA when applied to various species.

3. Determination and assessment of a mixing ratio of various soils and organic matters for greening:

Most of the soil in arid or semi-arid land is sandy and exists in severe conditions with little water-holding capacity, few organic substances, and high rates of evaporation and salt accumulation. In order to overcome such difficult conditions, this research project aims to develop the soil mixture ratio most appropriate for the primary cultivation of plant species for the greening activity. For example by mixing sandy soil with organic matter available in the locality (such as date palm leaves, sewage, sludge, and the excreta of humans and livestock).

4. Screening of salt and drought resistant plants:

Irrigation in arid land has always been faced with various problems related to salt accumulation in the soil and the quality of irrigation water. In Saudi Arabia there is no water source, which could supply a sufficient amount of fresh water, and over 90% of water used by humans comes from groundwater containing salts. Some plant cultivation in this country is also compelled to use such salty water in order to conserve fresh water resources. Under this research project, experiments are conducted on the levels of salt-resistance of different forage plants. It is also studying the impact of salt water irrigation on plant growth and soil. It also aims to evaluate the biomass of forage plants cultivated by salty water irrigation, to assess the drought resistance of desert plants, and to examine the economic viability of the greening plants from a viewpoint of salt and drought resistance.

5. Greening and nurturing of flowerbed seedlings technology by using the automatic seeding & germination machine:

In Saudi Arabia you often encounter many flowerbeds, trees and other types of vegetation in parks, along streets and around buildings. Seedlings needed for these are produced in many parts of the country. In Japan, as well as in Europe and North America, a common process of producing such seedlings is to make plug seedlings or cell seedlings first, from which polypot seedlings are subsequently cultivated. The objectives of this research are: 1) to select cultivation soil made of materials available in Saudi Arabia; 2) to establish the production technology of plug seedlings and polypot seedlings using the plug system and automatic seeding & germination machine; and 3) to examine the possibility of distributing the plants in water-saving planters (made of a container holding the plant and soil with a piece of cloth at the bottom inside another container holding water) in many parts of the city.



Use of symbiotic microbes in the outdoor pilot farm



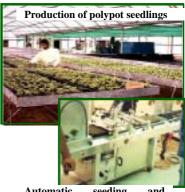
Use of growth promotant in the greenhouse pilot farm



Site for comparative study of organic materials



Examination facility for screening of salt and drought resistance



Automatic seeding germination machine

and

Mini Series: The participatory approach in regional development (1)

Part 1: PCM Method

These days the term "Project Cycle Management "(PCM) has become very popular in the field of development assistance. For JICA it has also become a fairly common practice in project planning in a wide field of activities, whether participatory (community-based) development planning or rural development, to use the PCM as the research method, based on which a Project Design Matrix (PDM) will be made.

PCM was developed based on a method of planning technical assistance projects, which was further elaborated to be applicable to various other fields of development aid and to ease the evaluation process after completion of the project. Literally, PCM is used to Manage the cycle, i.e. planning, implementation and evaluation of development aid projects with the help of PDM, and it consists of the two components of Participatory Planning (PP) and Monitoring & Evaluation (M&E). PP in turn consists of the analytical stage such as "stakeholder analysis", "problem analysis", "objective analysis" and "project selection", and the planning stage, which involves the formation of a PDM and a work plan. The analytical work is to be carried out step by step before a PDM and a work plan are formed with clear objectives and specific actions to be finally taken.

(See the figure below)

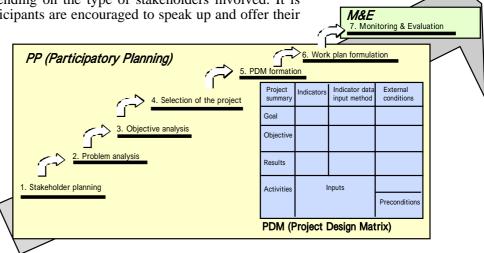
The PCM method is characterized by three major features:

- 1) Step-by-step process: The PCM goes through seven stages starting from the "stakeholder analysis" phase and ending with "monitoring & evaluation". A glance at the PDM will reveal the clear outline of the entire project.
- 2) Visual analysis and logical understanding: Participants are asked to write down their opinions about the project on a piece of paper and to put it up on a board. This visualization of various issues allows the analysis of the entire project. Also, at each stage, an analytical exercise will be done to look at "cause and results" and the "means and objectives" of various issues, which enables a logical understanding of the entire project.
- 3) Participatory process: Mutual understanding and problem-solving is given importance by allowing the stakeholders concerned to participate in a workshop-style gathering and discuss various problems. The sense of participation is also accentuated by allowing people to participate in the planning process of the project as its stakeholders.

Recently we joined in a training workshop on PCM planning and designing, organized by the Foundation for Advanced Studies on International Development (FASID). The PCM's obvious advantages are that with these method the project's objectives, methods, process and boundaries etc. can be shown clearly. Furthermore PCM makes it easier to select appropriate projects out of a number of rough plans. Moreover, at this training session we also realized not only its usefulness in problem solving with the step-by-step approach in the PP process, but also its effectiveness in basic project planning and designing. At the exercise session of this workshop the participants were divided into two groups and given the same theme to analyze

and for which to develope a PDM. A moderator was assigned to each group. As a result, the two groups came up with different PDMs. What this implies is that when the PCM is actually carried out, it is important to take enough care in selecting participants and moderators in the process. Completely different PDMs can be formed depending on the type of stakeholders involved. It is also important that the participants are encouraged to speak up and offer their

opinions honest discussion sessions. Incidentally, this FASID PCM training course is complemented, following the above session on "PCM planning and designing". "monitoring & by evaluation" and "moderator training" sessions.



Composition of the PCM method