

South Nyanza Regional Community Action Plan for Shifting from Tobacco small holder farming to Bamboo Production (Draft)

¹*J. K. Kibwage*; ²Kapiyo, R. A. J., ³G. W. Netondo; ⁴A. J. Odondo; ⁵G. M. Momanyi

*: *corresponding author*

1-5...Maseno University, School of Environment and Earth Sciences, P.O. Box 333, Maseno, Kenya. Office Tel: +254 -57-351204/351620/2, Fax: +254 - 57 - 351221/351153, Cell No. +254 722 479061, Email: jkkibwage@yahoo.com

A Brief Profile of the Bamboo Farmers' groups

Four farmers' groups were formed in the year 2006 (i.e. Homa Bay bamboo (Modi) Farmers Group, Migori Bamboo (Modi) Farmers Group, Kuria Bamboo (Imiere) Farmers Group and Suba Bamboo (Modi) Farmers group) and formally registered by the Kenyan Government Ministry of Gender, Sports, Culture and Social Services. Each group has 30 tobacco and non-tobacco farmers and officials elected as per their constitution/ by-laws. The groups are mainly engaged in bamboo farming/ production as an alternative crop to tobacco and as a long-term strategy of livelihood diversification, poverty alleviation and environmental conservation in the region. Each member of the group has planted averagely 20 (10 *Bambusa vulgaris* and 10 giant (*Dendrocalamus giganteus*) bamboo seedlings. Due to the positive results obtained from the bamboo growth and market surveys, the plan below was developed for up-scaling the experimental farms to averagely one acre each and expand the group membership in order to realize more impact of the project.

These Community Action Plans (CAPs) were developed through a consultative process, which involved meetings and discussions with members of each of the groups and some key stakeholders (i.e. Ministry of Agriculture, Maseno University Tobacco to Bamboo Research Team, and Office of the President-Provincial Administration representatives and local NGOs during workshops for each farmer's group. The farmers and the stakeholders identified some key issues which the farmers' groups needed to address during the plan period. The CAPs process also identified who to undertake the tasks identified and when the implementation should start. Supplementary information was also collected from the existing bamboo monitoring reports, household interviews data bank and Focused Group Discussions. Maseno University Research Team collated all the information and produced a draft of CAP for each group. An action plan for each group was subsequently discussed by the farmers' group members. Finally, the research team harmonized all the comments and produced a final document which was discussed and adopted by the four farmers' groups.

Common Key Issues identified during the Action planning process

Group Dynamics and Leadership: Leadership positions among some farmers group is mainly held by the older members and in other groups the positions are held by members from a close

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locality. This does not give way to the youth, who are more energetic to exercise their leadership skills and does not give a chance for the youths to learn and exchange ideas with the old. There is hence need to train the farmers on leadership skills that will allow for equal representation of all members of the group. This issue should be addressed immediately with the support from the Maseno University Research Team, Ministry of Gender, Sports, Culture and Social Services Constituency Development Fund, Non Governmental Organizations and Government Ministries of Agriculture, and Cooperatives Development and that in-charge of Youth Affairs.

Development of Office Infrastructure: Office and office equipments are very important for smooth operations of the farmers' groups. There is need to have good offices that are equipped with modern office facilities. Focus will be on buying land, building offices and purchasing necessary office equipment and stationery for the groups. Resources required to address these issues are to come from the Farmers themselves, Government ministries such as the Ministry of Agriculture and Local Authority, Constituency Development Fund (CDF), Donors and Non-governmental Organizations. To ensure smooth running of groups' activities, the issues need to be addressed immediately.

Bamboo Processing and Tobacco Control Training Centres: This is partly related to the above issue but in a wider perspective. The farmers expressed need for the establishment/ construction of 4 small-scale Bamboo Processing and Tobacco Control Training Centres (i.e. one for each farmers group). This will be an upscale of the existing capacity building activities currently ongoing in project. Most parts of the building should be of bamboo materials. Farmers learn on bamboo house construction by participating in the exercise. Extra bamboo materials can be sourced from the existing government bamboo forest resources. The Centre should have space for (a) working area with simple machines and tools (b) Store for bamboo materials (c) store for tools (d) store for finished products (e) Showroom of finished products well-displayed (f) Office for group officials (g) Room for seminars/ training (h) Kitchen (i) A few bamboo rooms for research visitors (j) Office furniture and other items made of bamboo. This will greatly promote bamboo in our study region. The Centres can also be used by local and international research students who will be studying Tobacco Control and Bamboo Production in future. The Centres will also train farmers on cultivation and marketing of other alternative crops to tobacco that can supplement bamboo.

Marketing system for bamboo products: A marketing system is essential in guiding market decisions on types of goods to produce desired quality and their prices. There is need to have a pattern of institutions and physical facilities that link the bamboo farmers and other marketing elements involved in the production and sale of bamboo items. The most possible way is to facilitate the formation and registration of Four Bamboo Farmers Co-operative organizations. The other option is to promote local private enterprises that will act as outlets of bamboo culms/ poles. Another option is the use of local NGOs in marketing the bamboo products on behalf of

the farmers. Formation of new bamboo processing groups was also suggested by the farmers. Marketing outlets identified include promotions in Annual Regional Agricultural Shows, Street and Shopping Malls Exhibitions, Online marketing, etc. All these approaches are recommendable to ensure competition, hence higher benefits for farmers. This can be achieved by the farmers themselves with the support of the Ministry of Cooperatives, Ministry of Agriculture, Media houses, NGOs, Donors and other project supporters. This exercise should commence immediately because the farmers have already started producing some products on a smaller-scale.

Provision of protective equipment to bamboo farmers: Bamboo leaves are prickly and can scratch human skin especially during weeding. This causes itching of the skin. Focus is on the provision of necessary protective clothing for the bamboo farmers. This matter should be addressed immediately by the farmers with the help of project supporters, Non Governmental Organizations (NGOs), Constituency Development Fund (CDF) committee and the Kenya Ministry of Agriculture.

Water Scarcity and Climate Change: A young bamboo (especially in the first 6 months) needs adequate and constant water supply for its survival and luxuriant growth. Focus should be on ensuring adequate and sustainable water supply for the bamboo farms. Since this is an urgent issue, Non-Governmental Organizations (NGOs), Constituency Development Funds (CDF) committee, the Ministry of Agriculture and other project supporters should immediately assist the farmers in digging boreholes and building water storage tanks where there is need. Though farmers are encouraged to plant bamboo during rainy seasons, current global climate change has made rain periods unpredictable.

Destruction of young bamboo shoots by termites: Termites tend to attack bamboo shoots especially during rainy seasons. Though the problem is minor, there is need to find a sustainable way to control the termites such as use of approved pesticides and training of farmers on farm management skills. Resources required to handle this case should come from the Farmers, Project supporters and the Ministry of Agriculture. This exercise requires urgent attention and should be a continuous activity throughout the project period.

Misconceptions and stigma on bamboo: Though traditional bamboo utilization mainly in housing and fencing is practiced by a few people in the South Nyanza region, some community members especially among the Luo community associate bamboo farming with witchcraft. However, among the Kuria (major producers of tobacco in Kenya), bamboo is culturally perceived positively as pillar of family unity. The Luo community negative perception constrains the adoption of bamboo as a source of livelihood. It is therefore important for the farmers and media houses to sensitize the community members on the significance of bamboo production and its related activities. Bamboo positive perception promotion outlets identified include periodical

Regional Agricultural Shows, Street and Shopping Malls Exhibitions etc. This has already picked up but it should be a continuous process by farmers themselves, development NGOs and the Maseno University Research Team.

Knowledge on the growth patterns of bamboo and management of the bamboo farms: It was noted that some bamboo farmers are unable to distinguish between various growth patterns of bamboo and they lack modern/ advanced bamboo farm management skills. There is need for trainings on bamboo growth patterns and farm management skills. Local, regional and international research visits were also proposed. This issue requires urgent attention by the farmers themselves, project supporters, NGOs, Media houses, Government institutions e.g. Kenya Forestry Research Institute, Ministry of Agriculture and the Kenya Forestry Service.

Long bamboo maturity period: Bamboo takes 3-4 years to mature, this makes farmers impatient and discouraged while waiting for maturity. Focus should also be on suitable early maturing crops (e.g. horticultural crops) on the same piece of land so that as the farmer takes care of the crop, bamboo will also be receiving the same care. Tackling this issue requires a farmer's patience, trainings on bamboo utilization at various stages of its growth cycle and financial assistance to the farmers when intercropping stops especially when the bamboo are 18 months old. The bamboo clump shades do not allow undergrowth after 18 months. This issue requires the farmers' efforts with financial assistance from the Project supporters, Ministry of Forestry, Ministry of Agriculture, Constituency Development Fund, Non Governmental Organizations, World Health Organization (WHO) and the Food and Agriculture Organization (FAO) among others. This is an urgent matter that needs immediate and continuous attention of the farmers and project supporters.

Vulnerable Groups: Vulnerable groups such as the aged and the HIV/AIDS and malaria affected people are unable to properly manage their bamboo farms. Such special groups should be assisted since the project area has the highest HIV/AIDS infection in the country. The National AIDS Council, WHO, NGOs and project supporter should mainstream the vulnerability aspect into the research program as soon as possible to ensure improved project performance.

Snakes attraction: Bamboo shades leaves especially during the dry season. Such leaves tend to harbor rats that attract snakes. Hence, the need for farmers to continuously keep the bamboo farms clean by utilizing the leaves as animal fodder or make compost. Strategic planting of local plants that act as natural repellants to snakes were also recommended. Bird nests should be removed immediately to avoid snakes that search for bird eggs and young chicks.

Limited Bamboo varieties: So far, only two bamboo varieties (giant bamboo-*Dendrocalamus giganteus* and common bamboo- *Bambusa vulgaris*) have been introduced in the study area. Since bamboo has over 1,500 uses so far documented, its utilization for various products depends on

the species availability. In order to have diversified uses of bamboo and to give the farmers a wide range of choice, there is need for introducing at least 5-10 commercial species in the long term. This will call for establishment of bamboo nurseries or purchase of seedlings. This matter should be addressed beginning November 2008 by the farmers with the support from Project supporters, Non Governmental Organizations (NGOs), Constituency Development Fund (CDF) and the Ministry of Agriculture.

Destruction of bamboo by domestic & wild animals: Bamboo is palatable and liked by browsing livestock (cattle, goats and sheep) and wildlife (monkeys, baboons and porcupines). There is urgent need to protect the bamboo farms from such destructions and replace the already destroyed bamboo plants. The farmers should address this matter immediately with some assistance from the Kenya Wildlife Service (KWS). In case of domestic animals, tethering and fencing of bamboo farms should be done. Fencing of all farms may require extra funding from donors.

Bamboo farmers' group identity / Publicity: Publicity is part of a marketing strategy and may open up important opportunities for the group. The focus will be to ensure that many Kenyans and the international community know about the groups and their development activities. Publicity should be through wider dissemination through TV and radio shows, periodical agricultural/ street trade fairs, preparation of Field Manual books, brochures in various local languages, TV and radio productions/ shows, conference news sheets, information news leaflets, newsflashes, newsletters, policy briefs, pocket guides, publications and periodical reports. This issue should be tackled immediately and continuously by the farmers with assistance from media houses, Non-Governmental Organizations (NGOs), Maseno University Research Team and other project supporters.

Local transport for bamboo monitoring and evaluation: Constant monitoring of the performance of bamboo by the farmers group officials help the individual farmers in sharing ideas and skills on the bamboo farm management techniques. This requires the group officials to get adequate means of transport to aid their bamboo monitoring exercise. The farmers recommended bicycles/ motor cycles to address the problem in the short term and long term.

Project Ownership: There has been perception that the bamboo project belongs to Maseno University and project sponsors. However, with more capacity building and empowerment of farmers, this should change in the long term. This calls for a partnership approach among all the stakeholders in order to ensure that the farmers fully own bamboo project as their own initiative.