

5.1 IMPROVING FARMING WITH ANCESTRAL SUPPORT

David Millar, CECIK, Ghana

During the last four years the Centre for Cosmivision and Indigenous Knowledge (CECIK) has carried out field experiments with endogenous development in the area of Bongo, northern Ghana. It is a rural area caught up in a vicious cycle of poverty. This chapter presents various new methodologies developed by CECIK, which take into account the worldview of the people in these communities, as well as the way they want to combine traditional with modern practices in agriculture, natural resource management and income-generating activities.



Savannah landscape in northern Ghana.

Northern Ghana is located in the Savannah Grassland belt. This belt is characterised by low vegetative growth of mainly grasses, low shrubs and dispersed trees. Rainfall in the region is unevenly distributed, erratic in start, duration and intensity, and ranges between 900 mm and 1000 mm. The temperature ranges from 22 to 40 degrees centigrade. Agriculture is rain-fed. Most farmers practise mixed cropping of trees, grain crops such as sorghum, millet, maize, groundnuts, and root crops such as yam. They also keep live-stock in the form of poultry, goats, sheep and cattle. In the dry season there is virtually no cropping, except for small gardens along the riverbeds and dams.

The immediate impression one gets on entering the region is that the bio-physical envi-

ronment is seriously degraded. One observes many gullies and sheet erosion due to water and wind. The major causes of this are deforestation for fuel wood, and inappropriate methods of traditional farming, such as uncontrolled bush fires and overgrazing. The annual population growth rate in the area is 6.8%, leading to serious pressure on the land, with estimates of about 300 people per square kilometre. The average land holding of a farm family is three acres, including rocky outcrops, and is continuously under cultivation. All these aspects have contributed to low crop yields - the average cereal yield is estimated at 300 kgs per acre. Inadequate food results in malnutrition of pregnant women and children. About 70% of the population are illiterate, and shortage of drinking water affects about 25% of the population. To supplement the little income from agriculture, local crafts and cottage industries have found a special place in the lives of the people.

The people

The people combine patrilineal and matrilineal forms of inheritance, with patrilineal being the most prominent. Access to land by women is limited. The primary source of labour is family labour; surplus labour can be purchased directly with cash or in exchange for an animal, or food and drinks. Various organised labour-sale groups exist in nearly all communities. Women groups dominate followed by youth groups. Reciprocal farming arrangements are common among the various groups. The traditional organisation of the household continues to be an aspect of identity, authority, and regulatory arrangement. The head of every extended household is its oldest male member. Female-headed families are common but female-headed households are rare. There are distinct gender roles in farm operations, access to land and other resources. The overall head of extended household presides over matters general in nature. Critical decisions about mobilisation and investments, offence and defence, disposals, opportunities and risks, are better managed at the level of the household.

Income from the livestock is more evenly spread over the year than from crops. Pigs, goats, and poultry are the most common sources of cash. Cattle are sold rarely, and only as a last resort. Income generated from handicrafts (hats and basket weaving) is considerable, especially during the dry season. Dry season gardening in the area is also quite common due to the proximity of the irrigation dams. Trickle of donations from family members living outside the community, and wage labour during seasonal migration of the labour force, are recognised sources of income. Women's income sources can be distinguished as crop sources, livestock sources, and commercial activities. There is marginal income support to women from their husbands. Nonetheless, women provide an income buffer to the household. They contribute to health and school expenses, procure most of the protein and vegetable requirements of the family, buy most of their own clothes, and respond to some social demands for cash.

Perceptions of poverty. Traditional lifestyles are continuously being challenged with calls for renewal. Perceptions about the future and the way to get there differ according to one's cultural background, age, sex, the country one lives in, and economic position. During a traditional festival called *Ndaam Koya*, Adongo Nso, an elder in the Gowrie-Kunkwa com-

munity in northern Ghana, played an ancient musical instrument with strange and beautiful rhythms, to herald the occasion. This was the first time David Millar, director of CECIK, had seen this instrument or heard its music, in spite of several years of working with the community. In a discussion the elder revealed his ideas about poverty.

David: *“How old is this instrument and how long have you been playing it? I have never seen it or heard you play.”*

Elder Nso: *“It is an ancient instrument used by our ancestors to sing praise, or for burial songs. Only my family have the skill to craft this instrument and use it. You cannot find it elsewhere.”*

David: *“I imagine you have quite a large family. How many of you play this instrument and how many of the young ones are learning it from you?”*

Elder Nso: *“Only two of us use it - me and my twin brother. Our sons and grandsons refuse to pick it up because they say it is for poor men and it will make them perpetually poor. You see! Our people experience poverty in many ways. In addition to not having material things, we also see poverty in terms of spirituality, knowledge and skills.”*

David: *“Can you explain these other dimensions of poverty a bit more?”*

Elder Nso: *“The missionaries were the first to tell us about our spiritual poverty. They thought it poverty to worship our ancestors. They also made sure we got even poorer by doing everything to destroy our religion. Then the government workers came with their knowledge about food production and again we were told that our own knowledge and skills were poor. They also made us poorer by trying to destroy our knowledge and replace it with theirs. Today there is large-scale poverty among our people, and those who replaced and scorned our customs, knowledge and skills are responsible for it.”*

David: *“What do you suggest to alleviate poverty?”*

Elder Nso: *“The government should certainly look at issues related to material poverty. But poverty in knowledge, skills and spirituality should be addressed at the same time!”*



Ghanaian elder: *“Poverty is not only referring to material things. We also see poverty in terms of knowledge and skills about community and spirituality”.*

Cosmovision in northern Ghana

In northern Ghana the traditional cult of ‘worship of the ancestors’ is central in the worldview of the rural people. There is also the general belief in an Allfather, and the ancestral arrangement traces itself to the founder of the village or community. Gods are symbols that allow for or facilitate communication with ancestors. The people sacrifice to their ancestral spirits for various favours, and the earth spirit is central amongst the spirits worshipped. The land priests perform the necessary rituals and sacrifices, which ensure

the prosperity of the land, fertility of the people, their crops and livestock.

Sacrifices and rituals take place during funerals, pacification, intercessions, calamities, festivals associated with productivity and seasonality. Although grains, especially millet and sorghum, are major inputs in sacrifices -especially the use of sorghum for pito brewing - livestock is also important. All consultations of ancestral spirits require an animal: the lowest-order sacrifice is done with a fowl or a guinea fowl; the next in order is a goat, and then a sheep and a cow. In relation to agriculture, people distinguish between crops and animals that are used for rituals, for consumption and for commercial purposes. Commercial crops are frequently introduced from outside and lack a relationship with the ancestors. Rituals are associated with food crops and ritual crops, but to a far less extent to commercial crops. In the worldview of the people the traditional crops were received from the ancestors. The spirits of the ancestors are the owners of humankind and responsible for their well being. A decision to adopt a new crop or a new variety, for example, can therefore not be taken without the advice of the ancestors.

Among the societies of northern Ghana, the family of the original settlers on the land have a special role. The head of this family is the *tendana*, the traditional earth priest and spiritual leader. This person allocates land use rights to the people in the village. Almost invariably a raised piece of ground on the outskirts of the village is chosen by the first settlers as a sacred place for worship, and for sacrifice to the spirit of the earth. With such a specialised function, this area usually also becomes the 'home' for other spirits or Gods that are communally owned. The spiritual world is integrated into nature, because the spirits reside there. Working with natural resources and agriculture, therefore, implies working with traditional leaders and institutions, because they are the ones who can mediate with the spiritual world in nature. While the ritual control of the land is vested in the land priests, the legal control is vested in the chiefs. The chief acts as the custodian of the communal land for the people in the Bongo villages, while the government is like an anonymous entity imposed on them.

Relatively recent introductions to the belief system of the people are the Catholic, Pentecostal, and Muslim faiths. The converts to these faiths, concentrated in the urban and commercial centres, often live in two worlds: though not formally accepted by the churches, they tend to practice their traditions in combination with their new religion. Thus, in this blended belief system, the converts to Christianity and alternative forms of worship, have not eradicated the ancestral cult. Therefore, in northern Ghana, it is common to find Christians blending their forms of worship with traditional ancestral sacrifices, especially in times of need for 'higher order discourses'. Moreover, there is always a lingering commitment to the perceived rewards and punishments associated with the belief in ancestral spirits.

Images of land and the environment. Imagery is very strong in the perceptions of the people of northern Ghana. Despite the external influences of Christianity and Islam, the traditional images described here run through entire communities. Nature is considered the visible part of the spiritual world, and referred to and treated as a collection of smaller Gods. Some parts of nature express themselves in the spiritual world and vice versa. From this perspective has arisen the Earth God, the Rain God, and the God of the Skies

(sun, moon, stars and the wind), which give essence to the material aspect of life. A special tree, mountain, river or stone may also be classified as a God. In this perspective, nature as a whole is conceived as a living entity, like an animal, with all parts interrelated and needing each other to function. Nature does not belong to the people, but the people to nature. Therefore, human life is intimately related with nature and constitutes the irreplaceable basis of human life.

Gender differences in cosmivision. In northern Ghana the position of women and men in relation to the spiritual world shows significant differences. Most traditional leaders are male. Occasionally there are women chiefs, women tendana and women soothsayers. The only strong spiritual relationships that women have are when they establish spirit mediums of their own. The ancestral spirits of the men are considered as related to the land of the household, which, in turn, makes their spirit linked to the location. Women have more claims to land belonging to their fathers than to their husbands, except in cases of special re-allocation. In their homes, the husband takes care of the Gods on behalf of the wife. The women explain it in this way: *“My son or my husband sacrifices for me. I provide the animal for the sacrifice, I speak to the ancestral spirit and tell them the purpose of my sacrifice, but the man does the actual sacrifice. I get the answers for my sacrifices, which satisfies my purpose.”* The woman, therefore, has a weak link to the spiritual relations both in her husband’s home as well as in her father’s home.

CECIK

The Centre for Cosmovision and Indigenous Knowledge (CECIK) is an NGO that promotes cosmivision-based endogenous development, providing services to rural communities in northern Ghana. Beyond actions at the community level, CECIK asserts itself in the areas of networking and collaboration, and advocacy for endogenous development. The existing staff is one full time director and three field assistants, two men and one woman, one is a community member and one is from the Ministry of Food and Agriculture. CECIK also collaborates with extension staff of other regional organisations especially with BAFP (Bongo Agroforestry Project) and MOFA (Small Ruminant Programme).

Methodology used for field activities. It is now accepted that in order to improve traditional farming technologies, the knowledge of both the rural people and of outsiders is important. Relating these two sources of knowledge requires a delicate process of formulating, comparing, merging, dialoguing and negotiating between rural communities and outside experts. Participatory Technology Development (PTD) is one possible methodological instrument for this process, which consists of several phases: getting started, looking for things to try, designing the experiment, execution, sharing the experiences, and sustaining the process. In my experience the phase of ‘farmers designing the experiment’ has been the most complicated one, as it is relatively easy if the researcher is ‘in the driving seat’, dictating the pace and direction of the experiments.

Since the start of its activities, CECIK has gradually recognised the vital role of the

worldview of the people in community initiatives and responses. This is not always easily understood, however. When elders of the indigenous communities in northern Ghana discuss important issues, for example, it always seems as if they are 'talking at cross-purposes'. But, in fact, they are using a creative way of communicating, which is often lost when it is interpreted or translated. The worldview of the rural people of northern Ghana expresses itself in their everyday life and conversations. The link between spirituality and the solutions to their problems, therefore, reinforces the relevance of cosmovision in the farmers' practices. This explains why we need to make cosmovisions a central part of our development interventions.

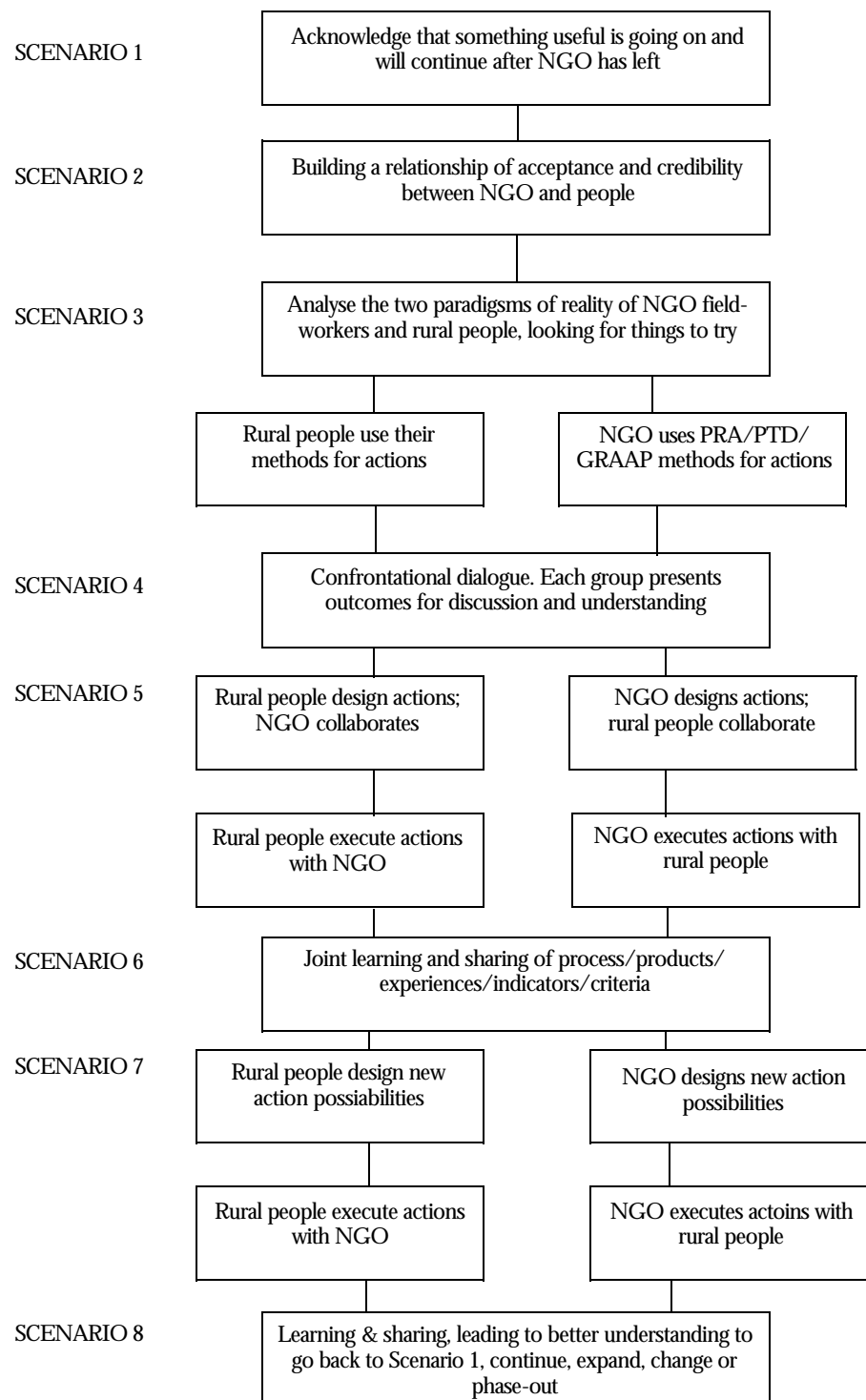
The general model used by CECIK for field level activities is the Empathic Learning and Action Framework (ELA framework, see box 5d). While the project representatives enrol the so-called beneficiaries in their actions, they also allow themselves to be enrolled in the communities' programmes. The ELA framework is an attempt to establish farmer-driven experimental designs, and is based on more than 20 years of experience in agricultural development. It makes explicit and addresses two different perceptions of reality: that of the rural people and that of outsiders, such as CECIK, who want to work with a rural community. By addressing these two perceptions mutual learning processes can be designed, ultimately leading to an improvement of rural peoples' practices and the quality of the interventions by outsiders.

Examples of field activities

Entering the community in cosmovision perspective. The field work of CECIK in Bongo started early 1998. During the first meeting in Bongo I introduced myself and tried to find out whether I was welcome. A tendana as well as a soothsayer and an elder, consulted their ancestral spirits and the Gods to find out what to do with me. While a libation - a sacrifice for the ancestral spirits - was performed, the tendana asked for the guidance of his ancestors. He also asked if both his ancestors and mine would clear the path and guide our actions. During our second meeting I was told that the response of the Gods and the ancestors had been positive. I was welcome to work with the community, especially on farming matters. Entering the community in this cosmovision perspective was a new experience for me. As a former government extension worker I had learned that you need to ask permission from the village chief when entering a new village. Now I have found out that entering a community implies much more than this. Clearance from the ancestral spirits is sought before people accept you. Only by accepting and respecting these rules can a relationship of confidence be built with a community.

In seeking clearance, another issue that we had to deal with was transparency in our relationships. The elders decided to have a village meeting to discuss a programme of cooperation between us. During this inception workshop I wanted to be very honest about my intentions, my doubts and our commitments. On this occasion the elders had this to share with me: *"It is true that we play games with you, the Karachis (local term for government workers). Every farmer is guilty of this. Just imagine the difficulty of paying back the loans. Parting with a substantial amount of the harvest that should sustain you till the next one is not easy, and when we can avoid it we will do so. We are sure you would do the same if you were in our shoes. But let us tell*

Box 5d Framework for Empathic Learning and Action (ELA)



you this. With our ancestors' way of building our relationship we cannot cheat you. We know of cases where people have cheated with the name of the ancestors and, as a result, have lost all their crops. We assure you that the activities we are about to start will not suffer. We will support and share the plight of one another - provided it is in line with the ancestral rules."

Supporting indigenous experiments. The CECIK field staff and the rural people in the Bongo area analysed the situation of decreasing crop productivity and the actions that could be taken to mitigate the situation. We discussed experiences from other organisations on the same issues, and compared these with the situation in Bongo. This discussion led to ideas about 'things that could be tried' in order to increase food productivity and ultimately improve livelihoods. The outcome for the different groups reflected their social status: the elders took to rearing small livestock - poultry and goats; the youth chose to cultivate millet, sorghum, and rice, combining this with fishing. The women opted for groundnut and soybean cultivation, and income generating crafts, particularly weaving. The community as a whole decided to start activities to reforest the shrines and groves in the area. The low soil fertility and *striga*, or devil weed, were identified as general problems by all members of the community, irrespective of their social position. It was agreed that experiments would be carried out to try to overcome this problem.

In the *striga* experiment the objective was to reduce the incidence of *striga* and increase productivity. The experiments involved 10 farmers. After the possibilities of using organic matter to control *striga* was analysed with the farmers, I realised that they had to lead the design of this experiment. For this I had to suppress my own inclination to put myself in the driving seat. Thus the design of the experiment was done by the farmers, based on the analogy of giving directions to somebody to reach the village following a footpath. After analysing various methods to combat *striga*, the farmers decided that they wanted to combine mechanical means like pulling, with chemical means of using phosphorous fertiliser and organic matter. In this design the mechanical aspects were based on indigenous practices, and the use of phosphorus was an external input.

The farmers decided on the indicators to assess changes in the weed's status: the *striga* population before and after the experiment, and the time required to weed the fields. Their indicators to monitor crop performance included: crop growth rate, structure of the crops (strong or weak, short or long, big or small), time for maturation, reaction to seasonal moisture stress, size and colour of the grain heads, and fullness of the seeds. The harvest was evaluated by the farmers in terms of harvesting time, quantity and quality of harvest, storage qualities, grinding quality, flour colour and smell, taste of the food, local dishes and local beer. Some of these experimental indicators were measured during the experiment; others could only be measured off-farm.

In the experimental design two main outcomes were anticipated: yield increases of cereals by about 25% and a decline in the incidence of *striga* from 100 plants to 50 plants per test plot of $\frac{1}{4}$ acre. When measuring the results after the first year we concluded that yields did not change despite the applications of an organic matter/phosphorous mix. *Striga* weeds averaged around 80 plants. After consulting my colleagues at the SARI research station, we realised that we had been too ambitious in our expectations, as it is impossible to demonstrate any significant change with this experiment after only one year.



Village meeting in Bongo: field staff of CECIK and traditional leaders plan rehabilitation of sacred groves.

Three years on the same piece of land would be necessary. The community had learned, however, that when weeding is combined with the application of organic matter and chemical fertilisation, the weed pressure can be reduced, costs lessened and benefits optimised.

Impatient outsiders might call this result a failure because we were unable to demonstrate more significant positive change. But during the 'learning and sharing workshop', the community had this to say: *"The problems we encountered now should not be counted as failures. Outsiders may call them failures, but in the Gowrie community we call them steps towards success. This is because in the process we have achieved several things. We have become united both in religion and in knowledge. It has facilitated the organisational work in the community. Moreover, more knowledge, both indigenous and external, has been acquired and our community has been recognised by surrounding villages for its work with CECIK. Our ancestors have been satisfied by the procedures followed and the sacrifices we have made to them. We would like to repeat this experience all over again because our ancestors say so."* In the following years, the results were indeed more positive. In fact, after 3 years the incidence of striga was reduced by 80% and the yields of the crops increased by about 25%.

Supporting women's experimentation. At present there is a lot of NGO attention given to women's groups in the region. In the area of formal education women still lag behind, but this is not the case in extension, where several income generating activities for women are being promoted. Yet, CECIK is the only one that includes the spiritual dimension, carrying out various endogenous development activities based on the cosmivision perspective, involving men, women, and youth. Of these three categories, the women are

least resource-endowed, but at the same time the most innovative group in finding ways to generate income. Several constraints have been identified as limiting and retarding the opportunities of women in agricultural production. One is the refusal or reluctance of men to release land to women, which is a great setback to women in gaining control of their lives through improved access to economic resources. Moreover, due to their poor economic status, women cannot procure the required inputs, such as farm tools, improved seeds, chemical fertilisers, and hired labour. Socio-cultural constraints include the attitudes related to crops: crops such as maize, sorghum, millet, yam, cassava, and pigeon pea are grown by men and are branded 'male' crops. Though sometimes women venture into the production of these crops, the practice is an exception rather than a rule. Women can cultivate other 'cash' crops, mainly legumes and rice; there are no specific 'female' crops, however. This restriction with so-called male crops denies women the advantages of mixed cropping [Millar, 1993].

Dialogue with women's group

When I went to the community for a pre-season discussion, I had this dialogue with Mrs Apangabasia, leader of the Gowrie-Kunkwa women's group.

David: "...Do the women have their plots ready for this season?"

Three women, almost at the same time: "No!!!"

David: "Then I do not need to leave their share of the fertiliser here. I might as well take it back and leave only that for the men".

Mrs Apangabasia: "We said NO because we really do not have land. But we shall get a piece. We do not own land but we do have access to land when the need arises. We only need to ensure that our plots are situated within the men's cropped lands so that animals cannot enter and damage our crops".

David: "What makes you so sure about getting access to land?"

Mrs Apangabasia: "Since the onset of your activities with us, the men are more willing to give us land.

David: "Why is this so?"

Mrs Apangabasia: "Because we are the better farmers. The men know this but will not accept it".

David: "How come you say that you are the better farmers?"

Mrs Apangabasia: "Take what happened last year. They gave us the poorest parcels for our groundnut production, land that they considered dead. What did we do? We prepared it, applied the 'petiliza' (local name for fertiliser) that you gave us. We then planted our own groundnuts and bambara beans mixture, and vegetables as border plants. We also planted a strip of the fodder grass you gave us around the plots. The animals owned by the men liked the grass very much. All the village animals, allowed to graze free after the crops were harvested, concentrated in our fields".

David: "How does all this make you better farmers than the men?"

Mrs Apangabasia: "Don't you see? We did not have organic matter to mix with the 'petiliza', but the planting of our groundnuts and bambara beans with the 'petiliza' enriched the soil so much that the men saw that the performance and yields of our crops were better than theirs. We do not have cattle but the men noticed that we provided fodder to their animals with the grasses we planted. We even sold some of this grass. The vegetables we cooked for the family. The men also observed that we had less striga in our fields than theirs hence, this year, they quickly took back this parcel of land for their cereal production. Are we not better farmers? Within one year we brought a dead piece of land back to life. They will surely want us do it again this year. Am I lying? So who are the better farmers: we the women or the men?"



Mrs Apangabasia and David Millar.

Farm-family concept

In dealing with issues of gender in agriculture, and the need for rural women to support their families economically, new strategies and approaches had to be designed that took into consideration the different constraints of the women to surmount their basic problem of gaining access to agricultural land. To build and sustain team spirit, a total of 124 rural women were organised and mobilised into three groups. Four training sessions per group were conducted on the improvement of the nutritional status of indigenous foods. The training programme culminated in a community food bazaar.

One activity, which the women themselves organised, was the mixed cropping of legumes and vegetables. CECIK encouraged the groups to take up the challenge of improving the fertility of the land granted to them by the men, by incorporating phosphorous fertiliser and by planting velvet beans (*Mucuna puriens*) as a source of green manure. The three groups were given fertiliser for their one-acre groundnut plots, and groundnut and soya bean seeds. All this - the chemical fertiliser, the leguminous crops (groundnuts, beans and soya beans), the vegetables and the use of mucuna as green manure - supported the women in being better farmers.

To operate effectively we had to ultimately consider men, women and youth as key actors in the development process - 'the farm family concept'. Thus whole families were involved in activities at the community level, which helped to enrich the indigenous knowledge. With both men and women involved, problems related to the transfer of ideas, experiences, skills and information were reduced. This reduced misunderstandings

and conflicts between women and their husbands. In almost all cases, the men were willing to co-operate and help their wives to supplement the family income.

The women say that CECIK's approach yielded significant results: land is now more available to women's groups in the project to cultivate the crops they desire, and the mentality and attitude towards women in crop production has changed drastically. Not only do women have access to land, they can also buy their own hoe and cutlass without being reprimanded. An increasing number of women have gone into crop production, even cultivating the supposedly 'male' crops. Many of the women can now go independently to their farms, and sometimes, join their husbands in weeding on the farms. In most cases, the husbands prepare the women's land for them, and in return expect the women to help out on the men's farms when weeding is due.

Working as groups has also helped in breaking the lack of confidence and trust among the women. Raising awareness and addressing gender concerns as a group lead to the re-establishment of traditional solidarity arrangements, which had been largely forgotten. Child nutrition has improved significantly: the combination of soybean with local foods resulted in weight gains of children up to 20%. Women's income has also improved significantly, both from selling crops as by keeping livestock. Two women's groups now have bank accounts that they use to access credit, and one women's group is running a rotational livestock supply system. CECIK realises that its strategy should be to provide even more assistance to women's groups.

Improving natural resources: shrines and groves. In the Boosi Chiefdom in northern Ghana most of the land is barren, depleted of permanent vegetation. Yet various small clusters of bushes, trees and grasses are prominent. Almost invariably these are shrines or groves. To survive the test of time some degree of protection must have regulated these isolated clusters. A shrine is a sacred place or item of worship, sometimes in a natural environment, sometimes within the house. A grove is a forest patch - sometimes a remnant of an original forest- that is perceived sacred by the people. Shrines and groves vary in their physical and biological appearance. They can include a cluster of trees and shrubs, water bodies, a range of rocks, a river with a valley or a few stones gathered in a heap. The location of a shrine or grove is related to a historical site. It may indicate the location of settlement of the first ancestor of the village or a site identified by a soothsayer.

CECIK has conducted a study to look at natural resource management of the shrines and groves. The following questions were addressed: what are the historical changes of shrines and groves in the Gowrie-Kunkwa area? What structures guarantee the survival of shrines and groves and how do the regulatory mechanisms operate? How are the shrines and groves perceived by individuals and by communities? What is their role in bio-cultural diversity maintenance; can they be regenerated and how? A total of 20 shrines and groves were encountered in an area of about four square kilometres. The largest shrine occupied an area of about four acres. It consisted of a chain of rocky mountains. The smallest shrine of half an acre was found in a valley. The average size of the shrines is around two acres.

It is our experience that one can rely on key informant interviews in order to connect with people's spirituality. So we started talking with the chiefs, the tendanas or earth

priests, the spirit mediums, elders and opinion leaders in the communities. On a few occasions we started with one person and a group was formed spontaneously. We wanted to deal directly in the local language and were lucky to find a key facilitator from a *tindamba* family, the family of the Earth God. Funerals, markets and festivals were good opportunities to have more in-depth dialogues. We also used participatory observation during the visits to the shrines and groves. We wanted to see what was there and feel the sacredness of these places.

The spirits inhabiting the shrines and groves are important to the people; not the shrines and groves themselves. When sacrifices are performed correctly and by the right people, the spirits will protect the community. In this way the ancestral spirits serve as a vital communication link between the living, the dead and the yet unborn. The physical role of the shrines and groves is to provide rain, fertility and health. They propel livestock development, and ensure peaceful co-existence between mankind, vegetation and other parts of nature like stones, mountains and rivers. Socially, shrines and groves are significant because they provide a common place of worship, where the community meets to perform sacrifices and resolve conflicts.

Traditional rules have to be followed for all shrines and groves. Replanting is not done but natural regeneration is stimulated. The traditional rules are quite strict and offenders face strong punishments. Hunting, fishing and cutting wood is only permitted on special days, and the community is not supposed to harvest the vegetation for private use. Wildlife in the shrine or grove is considered sacred and should not be killed without the consent of the *tendana*. Trees should not be cut for musical instruments and dead wood should be picked before live wood can be cut.

The *tendana* explains: *“With the coming of Christianity and modernity, the position of the shrines and groves has been undermined. The traditional rules for the use of shrines and groves are weakening. We have lost some of the trees, but the spirits of the good trees still remain there. Most of the wild animals have also escaped but their spirits are also still in those shrines and groves. Above all, the spirits of our ancestors have remained intact. People that claim to be Christians go in to fish, kill wild animals, pick dry wood or cut trees. Only the elderly keep to the tradition. However, when the young encounter problems in their newly chosen way of life, they run back to us to ‘look into things’ for them.”* One of the elders: *“We lament it that a majority of our youth today has become the victim of these unfortunate ideas. Despite this we foresee the return of our youth to their roots at a more advanced age. They need to be sufficiently informed about important aspects of our culture.”*

The communities in the Gowrie Kunkwa area reacted very positively when discussing the idea of working on the shrines and groves, indicating the need to work in partnership with outside organisations. Concrete ideas have been developed, such as planting trees, de-silting water bodies, re-activating the water bodies that have dried up, and re-stocking them with fish. Community members argued that shrines and groves can only be developed when the right process is followed. This includes allowing the people to do it their own way, abiding by the traditional rules. Appeasing the spirits is an important component in the conservation effort, as well as proclaiming the shrine or grove as a restricted area with traditional regulations.

Lessons learned

Over the past years we have learned that working from a cosmovision perspective has many challenges. In the process the following constraints were encountered:

- Limited experience with and understanding of local cultures by the outsiders (in this case CECIK staff) in the initial phase.
- The evolution of new ways of working with no precedence to guide us.
- Dealing the cultural gender inhibitions proved quite difficult.
- The role of youth in cosmovision has been problematic, as they are relatively more responsive to indigenous technical knowledge than to the spiritual aspects of it.
- The communities are still poverty-stricken, which often leads to short term solutions rather than long term developments.
- It is difficult to show quantitative impact when development is dealt with from a cultural perspective.

The project had to go through several growth paths. The initial intention of working with one village and one group had to be abandoned in favour of dealing with 3 sections different cultural identities. Each of these three groups were further divided into 3 men's, 3 women's, and 3 youth groups, as proposed by the communities. This has had implications for staff numbers and slowed down. The CECIK working strategy involves not having full-time staff but taking advantage of existing staff of various development agencies, people based in the communities who are knowledgeable and capable, and paying them an allowance for time input. It is our experience that this arrangement sets the stage for early networking and active involvement of the community in self-development processes. It also takes advantage of certain untapped skills that exist within the communities. With this approach, you also find yourself working into the existing dynamics of the community with minimal interference or destabilisation of the social organisations. The only risk is that such staff may give certain favours to special members of the community.

CECIK has succeeded in establishing the fact that spirituality and cultural performance are an essential part of rural people's worldviews, and critical in ensuring that local and demand-driven development is sustained. In order to work from a cultural perspective, we had to make adjustments. New activities were included as the programme progressed. Such a demand-driven approach has budgetary and logistical implications. The general development strategy, promoting development based on peoples' own indigenous knowledge systems and spirituality, was found effective. Development workers who support rather than ridicule, who do not demand a change of worldview or anger their ancestors, are well accepted by communities. One elder remarked: *"The project respects and values us because they do not look down on our belief and value systems. It is therefore bound to succeed."* This is a very important basis for a development project. As much as possible, the ability to communicate in the local language is our guide for resource persons and field staff. Sensitive issues such as the position of women, elders and spiritual leaders can be touched once the relationship between the outsider and the community has been established in the cultural (and spiritual) context. The implementation of the project activities has had a positive impact on gender and gender relations. Women are now able to speak up during general

Box 5e Results of endogenous development support by CECIK

Aspects of endogenous development	Field activities implemented	Environmental, socio-economic, and cultural impact
Building on local initiatives to use resources	Start with local leadership Use community based staff for implementation. Start with existing IK and then introduce improvements.	The use of elders, soothsayers, and women leader has helped in community mobilisation. staff has built local capacities. Soil fertility improvement increased about 25% yield of indigenous crops. 3 Groves are being rehabilitated.
Building on local needs	Livestock improvement for men Craft development for women Gardening and fishing for the youth.	60% of the elders reached have doubled their livestock holdings. Women dry season incomes have increased by over 80%. The youth made income gains of about \$100.
Improving local knowledge and practices	Striga weed control activities. Livestock improvement. Child feeding/ nutrition improvement.	All 6 plots are about 80% striga free. More livestock available for sacrifices and income. From soyabean combination with local foods child weight gains of up to 20% is visible.
Local control of development options	Working with natural social grouping Separating women and youth groups Responding to different livelihoods Evoking ancestral spirits through sacrifices.	They are more response to environmental issues pertaining to each group. Dialogue and social dynamics have improved and they have been differently challenged. Empowerment through income generation for the women has increased to even 100% of previous incomes. The fear of the unknown has resulted in responsible actions.
Identification of development niches	Legumes in livestock feeding. Conservation of indigenous seed. Introduction of finger millet.	Although some was used for livestock feeding, the sale of this for cash for the women resulted in about 10% of their offseason income. Indigenous seed conservation and propagation of finger millet is identified for Phase II.
Selective use of external resources	Phosphorus in organic matter for striga control. Fish farming and piggery combination. Grinding mill for women.	Reduced the incidence of striga by about 80% and yield of cereals has increased by about 25%. Feeding pigs and using their waste to feed fish has generated incomes from the sale of both to \$ 100/yr. Women labour is saved, walking distance of 4km is no more and women make income of \$ 200/yr.
Retention of benefits in the local area	Women saving accounts with Bank. Conversion of grain incomes to livestock. Gardening for local vegetables.	Two of 3 women groups have bank accounts that they use to access more credit. One women group is running a rotational livestock supply system based on sale from group farms. Two youth gardens have provided local vegetables to the communities.
Exchange and learning between local cultures	Poster exchange with India. Workshops and meetings Excursions and visits.	A poster was received from India, the community discussed it and are now developing a reply. Staff attended 4 workshops and director 6 meetings. 2 excursions were organised for community members; one in the Upper East the other in the Northern Region.
Networking and strategic partnerships	Conferences attended by Director. Publication of The Horn and other documents.	2 national and 3 international conferences attended to share on cosmovision and indigenous knowledge. Quarterly publication of The Horn, contributions to The Savanna Farmer, and 7 documents printed.
Understanding systems of knowing and learning	The role of the ancestors 'Male' versus 'female' sacrifices. Tutelage as in schools programme.	Annual 'Ndaam Koya' festival Annual competition of schools collecting indigenous knowledge on trees and plants from their parents.
Other aspects	Social recognition as in chieftainship.	The Gowrie Kunkwa community acknowledge the valuable contributions of CECIK by installing the director as a functional Chief.

meetings, and both women and men have expressed the changes related to the tasks and responsibilities as a result of the project. Women have also extended their support to and working relationships with group members beyond project activities. The sharing of benefits accruing from development activities is more profound and far reaching with women than with the other groupings. More gender awareness training and general education (literacy courses) are needed, however.

Working on the basis of the ELA approach has strengthened the farmers' capacity to experiment. The approach has motivated the community to experiment within their own cultural context and, in this way, has moved participation a step forward. The approach has led to considerable confidence of the people in their own capacities to change, learn and develop. It has provided us with new ideas about 'the process of farmer experimentation'. In our quest for endogenous development this process can be adapted and the basic principles can be replicated beyond the Gowrie community.

We believe that it is better to work with groups, especially for the women. It is important, however, to deal with naturally occurring groups rather than those that are 'project-made'. The idea of cultural differences should be reflected in group formation as well. The women's groups are more responsive to their developmental needs, followed by the elders and then the youth. The youth tend to be complacent in their actions and easily run into conflicts. The effect on youth has been considerable, especially in the fishing activity.

Plans for future activities include: continuation of the successful livestock programme for elders, stimulate growing and consuming indigenous foods by women and children, income generation activities for women, crop production with focus on legumes, striga control and soil fertility, youth and fishing, and development of shrines and groves. Conscious efforts in networking, dissemination of information, collaborative workshops and peer reflections, have been made at various levels. A quarterly newsletter 'The Horn' has been published by CECIK and distributed throughout the country. Close collaboration with some local NGOs and Ministries have been established. Possible new linkages include the University for Development Studies, the Ministry of Food and Agriculture, various NGOs, and various World Bank Projects in the area. This will be further extended in the form of in-country linkages, regional networking within the west African sub-region, and international linkages as envisaged within the Compas Consortium of Universities. These platforms will serve as opportunities for policy advocacy on a broader basis.

We can conclude that endogenous development has a considerable perspective, but is a time consuming process. All actors involved have to assess the relevance of both types of knowledge: outside knowledge and indigenous knowledge, and think creatively about new options for combining these is the most favourable way under local circumstances. The methods and approach for endogenous development needs to be developed further, however. Enhancing endogenous development is a continuous and challenging learning process.