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APPROACH USED BY GOVERNMENT AND NON-GOVERNMENTAL ORGANIZATIONS (NGOs) IN PROMOTING CROP PRODUCTION AND ITS IMPLICATIONS ON FOOD SECURITY AND HUNGER IN RURAL SWAZILAND: A CASE STUDY OF SITHOBELA AREA

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ABSTRACT

This study was done to establish the appropriateness of government and NGOs strategies to improve food security through the production of drought resistant crops in Swaziland. To determine this, analysis was done on the current rural Swazi livelihoods, strategies used by subsistence farmers to cope with hunger, priorities of both subsistence farmers and change agents and the approach used by change agents to fight hunger. Sithobela community was picked as a case study and a total number of 72 farmers were interviewed who were heads of households irregardless of gender and age. The change agents included in the study were from World Vision and MOAC. The study found that the majority (54%) of the households interviewed, their livelihoods were non-crop growing oriented. Also, priorities of subsistence farmers did not match those of change agents. The results also show that the majority (72%) of the respondents had employed non-crop growing strategies to alleviate hunger and food insecurity in Sithobela community. Moreover, the results reveal that there was no collaboration between change agents and subsistence farmers. The key conclusions found by the study were that farmers were not for crop growing anymore but were for non-farm activities. Moreover, goals, priorities and objectives of farmers and that of change agents were different and there was no collaboration. Unless there is collaboration between farmers and change agents, and the goals and strategies match, government and NGOs will not be able to attain their goals thus hunger and food insecurity will continue to prevail in Sithobela community.

Keywords: Approach, Framers, Government, Food Production, Sithobela, Non-Governmental Organizations Community

INTRODUCTION

Sub-Saharan Africa has been described as having the most intractable food problem facing the world (Morgan, 1994). Abdulai *et al* (2005), points out that food production in the region remains almost 20 percent below the levels observed 30 years ago. As a result of the poor food production, hunger prevails in the region. Those who suffer most are rural communities practicing subsistence oriented farming. Subsistence food crop farmers' capacity of producing maximum food crops has been reduced such that they are completely failing to feed the more than fifty percent of the Southern Africa agriculturally based population (FAO, 1989), which they were feeding 30 years ago. Consequently, a large proportion of the rural population practicing subsistence oriented farming suffers from severe hunger. This rural population compared to urban population constitutes a larger group estimated at 1.1million (FOA/WFP, 2001).

Approaches in the Implementation of Rural Development Projects

According to Paul (1987:67), "the beneficiary must influence the direction and execution of a project implemented with a view to enhancing their well being". It has been noted many at times that expert knowledge alone usually does not achieve the desired purpose when the beneficiary group's ideas are not considered. The beneficiary must influence the direction and execution of a project implemented with a view to enhancing their well being (Paul, 1987). Nyerere (1968), on the other hand argues that people are not being developed or assisted when they are herded like animals into new ventures. He further argues that they can only develop themselves by participating in decision and cooperative activities, which affect their well being.

Strategies Adopted to Improve Crop Production and Food Security in Various Countries

Similar to Swaziland, agriculture in Burkina Faso is the main sector of the national economy, employing more than 80 percent of the labour force and accounting for about 40 percent of the gross domestic product (GDP) (FAO, 1996). History reveals that Burkina Faso in the late 1960s to mid 1970s had been severely hit by food insufficiency as a result of drought. The country was one of the leading countries in food insecurity in the world.

A study by Lele (1990) on Structural Adjustment, Agricultural Development and the Poor in Malawi reveals that the country had tried various means to combat the food shortage problem by encouraging smallholder farmers to adopt and grow other crops, other than their traditional maize. However, its attempt failed for there were other parts which were ignored. The government's campaign to increase food crop production and diversification of food crops away from maize by smallholders proved a failure because most of the smallholder families did not have enough land to diversify out of maize, (Lele, 1990). These propelled the pressure of wage employment, which the state was unable to provide, and thus the standard of living continued to decline

Agricultural Policies in Swaziland

Taylor (2005) asserts that it is essential for policy makers to have a micro-level understanding of the rural economy situation because of the fact that most of the poverty stricken population is concentrated in rural areas. Taylor implies that in order for the policy makers to have micro understanding of the rural economy situation, they have to collaborate with the poor subsistence farmers in formulating effective strategies and plans to eradicate hunger in drought prone areas. Therefore the approach used should be one that facilitates collaboration.

It is amazing that even though the drought has been in the country for about 15 years, Swaziland has not yet formulated a policy to deal with the problem. Available policies under the Ministry of Agriculture and Cooperatives are: The National Livestock Development Policy, enacted in 1995, the National Action Program of the Convention to Combat Desertification of 2001, The National Forestry Policy approved in 2002, and The Rural Resettlement Policy of 2003. The Comprehensive Agricultural Sector Policy of 2005, which supposed to be the agricultural policy, is still a draft policy awaiting approval in parliament. Swaziland lacking that policy will never ever achieve food security. Countries that have seen great achievement in reducing food insecurity such as Burkina Faso and the Republic of Bangladesh followed and still follow their agricultural policies. Swaziland government just issued statements which are not binding. This then might be another reason for the consistent decline of food crops.

Approaches Adopted by Government and NGOs to Increase Food Crop Production and Poverty Alleviation in Swaziland

The prevailing hunger in the lowveld suggests that subsistence farmers, in collaboration with government and NGOs that have expert knowledge on ways to alleviate hunger and poverty, should find new ways of producing sufficient food crops in the lowveld. A comprehensive participatory approach and strategy through which, collaboration of knowledge of change agents with that of subsistence farmers (recipients of change) shall be united and utilized (FAO/WFP, 2001). Efforts has been done on the side of experts to empower subsistence farmers alleviate hunger by increasing their crop productivity through crop diversification and through adoption of drought tolerant crop varieties to be grown in favour of maize (CASP, 2005). However, the recipients who are lowveld subsistence farmers seem to fail to take the initiative to diversify and grow the already mentioned food crops in replacement of the staple food maize. The cause might be because their indigenous knowledge has been ignored. It might be failure of cooperation between the two groups. It might also be the approach in which the programs were introduced that has escalated the dramatic decline in food crop production over the past fifteen years. Due to decline in food crop production, increase in cereal import into the country has been facilitated on the one hand while on the other hand the country is facing increasing expenditures on cereal imports yearly. Consequently, an annual budget of US\$1.3 million has been issued for food relief programming (FAO, 2006), which has eventually pushed the country into a serious deficit as well as economic growth decline.

Swaziland is one of the African countries in Southern Africa Development Community (SADC) region that suffer from hunger because of repeated food crop failure, maize in particular. From a long-term perspective, maize production in Swaziland appears to be on the decline. Access to food for poor households remains a very serious issue and the available data indicates that the per capita consumption of maize has been declining over some time without significant cross-substitution with other foods (Dlamini, 2006). Swaziland's economy is based on agriculture and agro-industry and is classified as a lower middle income country with a per capita income of US\$ 1 245 in 2008. It is said that 40 percent of the population is the poorest while 66 percent of the total population live below the poverty line (WFP, 2009). Swaziland's annual maize harvest in 2009 was estimated at 70,000 tons, which is slightly more than last year. However, Swaziland will still need to import around 90,000 tons during the current consumption year (April 2009 - March 2010) to fill the national cereal gap (WFP, 2009). Swaziland's annual maize harvest 2010/2011 was estimated at 84,670 tons, which is a 12% increase compared to production during the 2009/10 season. This is largely attributed to improved rainfall performance during the 2010/2011 season, although this was also characterized by dry spells (FAO, 2012). The people in rural areas of Swaziland occasionally produce cash crops.

Subsistence households in rural lowveld of Swaziland are characterized by low income; hence most of them live below the poverty line of E71 per day (FAO/WFP, 2006). Most of them live on food aid from the government and NGOs or by engaging into wage employment (which is rare) to buy food. The government through its National Development Strategy (NDS) seems to be using the 'top-down' approach to address food insecurity in the lowveld. As an example, the government has proposed to encourage diversification of agricultural production whilst intensifying production of high valued crops and

stocks (CASP, 2005). We do not know whether the beneficiaries were consulted and embrace the same idea or not. According to FAO/WFP (2001), a comprehensive participatory approach is needed.

Ever since the food crisis started in 1990, maize production in the lowveld - a staple grain crop for most rural areas in Swaziland – is declining significantly year after year. Farmers are now reluctant to grow maize but reluctant again to adopt and grow drought resistant crops. As a result most of the fields are lying fallow. A lot has been done by government and NGOs to empower subsistence farmers to alleviate hunger in the lowveld. On the one hand, the government has recently set the Millennium Development Goals, of which goal 1 aims at eradicating hunger and poverty in Swaziland. Moreover, the government is encouraging lowveld subsistence farmers to adopt and grow cassava, sorghum, sweet potatoes and short term beans which are more tolerant of dry conditions than maize.

Therefore this study was designed to establish the appropriateness of government and NGOs strategies used to improve food security through the production of drought resistant crops in Swaziland and to determine whether there was collaboration between change agents and subsistence farmers through sharing of the same goals, priorities, plans and strategies to reduce food insecurity in the lowveld.

STUDY AREA

Swaziland is a landlocked country located at 26° 30′S and 31° 30′E and occupies and area of 17400 square kilometers. Swaziland has four main distinct agro-ecological regions: Highveld, Middleveld, Lowveld and Lubombo. Sithobela is a rural community within Swaziland, located at 26° 52′S and 31° 36′E. It is located in the Lowveld agro-ecological zone (**Figure 1**). It is approximately 27 kilometers away from Siphofaneni, along the Siphofaneni-Hluti road. Its relative location lies within neighboring rural communities which are: Kubuta in the west, Madubeni in the south and Gucuka in the east.

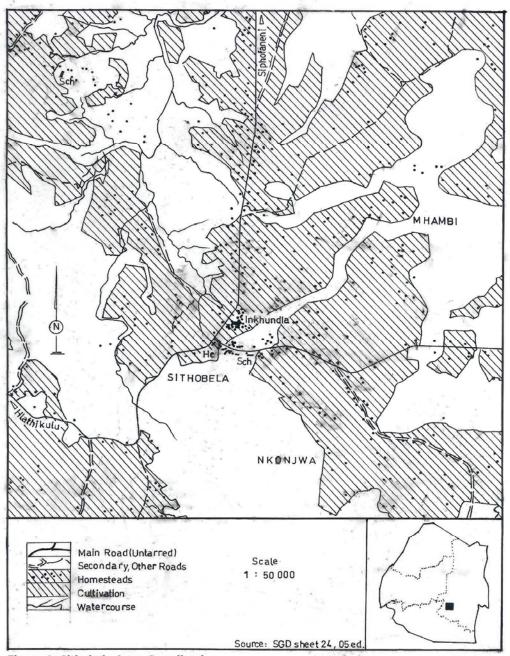


Figure 1: Sithobela Area, Swaziland

Sithobela rural area is sparsely populated. The total population of Sithobela rural area is 3893 while the total number of farmers is 72 and the number of households is 84 (Central Statistical Office Report 2007). The population is mostly dominated by women and children. Food crops fail yearly as a result of many factors including drought and HIV and AIDS. People in the area sustain themselves by engaging on piece jobs or on small domestic business such as handcraft and homebrewed beer. Most people are food insecure, following that Sithobela is located in the Lowveld where there is high level of food insecurity.

METHODOLOGY

Three methods of data collection were used to collect data household interviews, focus group discussions (with subsistence farmers), Consultations with change agents (experts' group) and Senior Extension Officer Review of government and World Vision policy/project documents. The researcher carried out the household interviews using household questionnaires containing both close-ended questions and open-ended questions. An interview guide for collecting data from World Vision Officers (NGO), Government Extension Officers in the area and from Senior Extension Officer in the Ministry of Agriculture and Cooperatives, focused mainly on the approaches used by government and NGOs and their plans to fight against hunger and poverty in rural areas especially in the lowveld. The secondary data was used to find out the objectives and strategies as well as the approach and priorities of government and NGOs used to introduce new innovations and to alleviate hunger and what had been done so far pertaining food insecurity in the lowveld.

Sampling

There was no sampling carried out. According to 2007 statistics report, there were 84 households in the area. However, the actual number of households found in Sithobela community was 72 in total. All 72 household heads were interviewed for data collection.

Data Analysis and Presentation

The data collected was analysed by comparative statistics comparing the views and goals, objectives, plans and strategies of subsistence farmers with those of government and NGOs to alleviate hunger and poverty in the lowveld. Also data was analysed using frequencies. General themes were identified and each piece of data was classified accordingly. Data was analysed using Microsoft excel. The data was then integrated and summarized by packaging into an organizational scheme. Data in this study was summarized in frequencies and presented using graphical techniques such as tables, bar graphs, pie charts, and was supplemented with some form of narration.

RESULTS AND ANALYSIS

Rural Livelihoods

The results on Figure 2 show that the significant source of livelihood of Sithobela community was crop farming (46%). However, the majority (54%) were not basically depending on crop farming. Most of these depended on non-crop growing agricultural sources such as remittances (15%), wage employment (13%), livestock (13%) and business including handcraft (12%). This indicated that farmers' focus had shifted from relying entirely on crop farming to non-crop growing agricultural

sources from which they seem to retrieve most of their income. The results also show that 54% were females while 46 % were males. The study revealed that 50% of the farmers were of the age group 30-45, of which 16.7% were males while 33.3% were females.

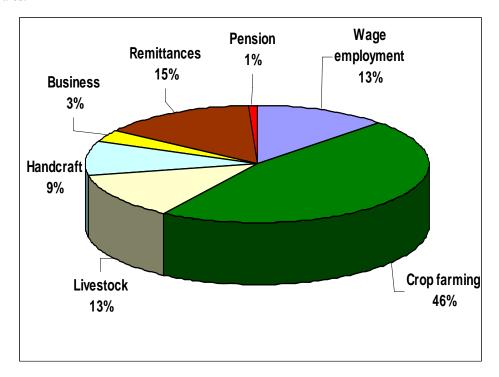


Figure 2: Livelihoods of Sithobela Farmers

Source: Fieldwork

Resources for Livelihoods in the Rural Areas

The main resource is land. The research found that all farmers had access and owned their pieces of agricultural land. This indicated that farmers had a potential to alleviate hunger as they had the major resource. However they did not till all the land they owned.

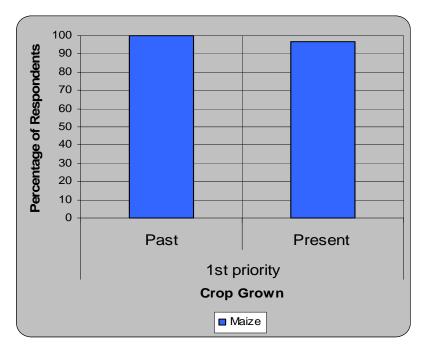


Figure 3: Main Crops Grown (past and present)

Source: Fieldwork

The results revealed that the majority 68.1% owned between 3 hectors up to 11 hectors of land per farmer. Only 30.6% farmers owned between 1 hector to 2 hectors per farmer. However, 85.6% till less than 4 hectors of their land. Most of their land remained fallow as crop growing was no longer the first priority. The results on Figure 3 show that despite the promotion of DRCs, maize remains the farmers' first priority crop from the past 100% and at present 97.5%. Although farmers in the lowveld has been encouraged to substitute maize with drought resistant crops (Sukati, 2007).

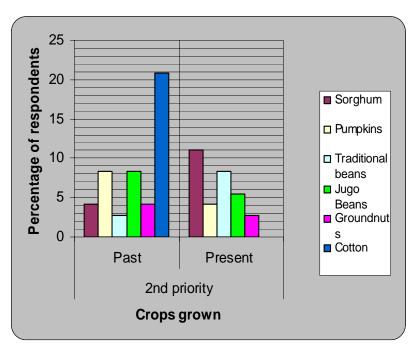


Figure 4: Other Crops Grown (past and present)

Source: Fieldwork

Other crops were grown in small quantities either as second priority or third priority. Figure 4 show that cotton 22% in the past, was the only major commercial crop grown. At present cotton was no longer grown because of lack of market. Sorghum, a drought resistant crop, was grown in small quantities however; there was an increase from 0.4% in the past to 11% at present. The increase was because sorghum was a major ingredient of homebrewed beer.

Levels of Food Self-Sufficiency and Means Used to Secure Food

The results on Figure 5 showed that the 76% of households were food insecure. Of the 76% who were food insecure, 47% lived below average while 29% lived under chronic food insecurity. Even the remaining 24% households had average food security; not that they were food secure meaning that the food they had, did not last them through out the year.

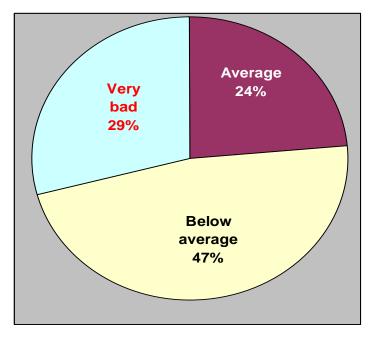


Figure 5: Level of Food Sufficiency at Present

Figure 6 below showed that food in Sithobela community was secured through: mostly purchasing (52%), and receiving donations including remittances (31%) and only (17%) depended on crops grown. Farmers who relied only on crop growing and donations (48%) were the most vulnerable to food insecurity and they lived below average and chronic food insecurity.

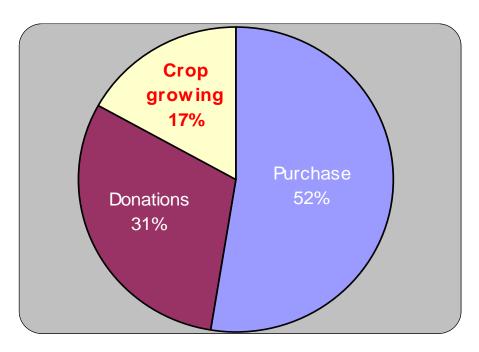


Figure 6: Means of Securing Food at Present

Internal Production

The results in Table 1 show the total number of maize bags harvested each year by all farmers who used crop growing as one of the means to secured food. According to MOAC (2005/2006) one hector of maize was suppose to produce 4 tonnes (about 57 bags). The average number of maize bags harvested per household per year in Sithobela community was about 6 bags yet each household planted more than 1 hector up to 4 hectors of maize. The average, 6 bags harvested each year do not sustain the farmers' household throughout the year, as each farmer had an average of 5 people per household to feed.

Table 1: Number of Maize Bags Harvested Each Year

| Year | Total Number of Bags |
|------------------|----------------------|
| 2003/2004 | 492 |
| 2004/2005 | 435 |
| 2005/2006 | 457.5 |
| Average per year | 6 per respondent |

Sources of Income

Sources of income are an indicator of a farmer's capability to alleviate hunger as the farmer could use them to secure food. The results on Figure 7 show that a major source of income in Sithobela community was income from domestic production (38%), followed by donations (31%), then remittances (16%), wage employment (12%) and pension (2%). Farmers who rely on donations and remittances (47%) only were most vulnerable to food insecurity because if they did not receive donations and remittances, they remain without food.

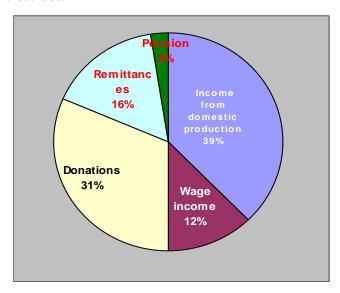


Figure 7: Main Sources of Income Used to Secure Food

Source: Fieldwork

Other significant sources of income the study established in Sithobela community were growing of commercial crops, keeping livestock and birds, and business.

Livestock and birds kept in Sithobela community both in the past and at present included cattle, goats, sheep, piggery and chickens/poultry. The results on Figure 8(a) show a decrease in the number of households keeping cattle at present than in the past. At present 19% of farmers reared cattle while in the past 31% were rearing cattle. However, there was a significant increase in households keeping piggery from 7% in the past to 14% at present. It can be seen from the Figure 8 (b) that a significant increase in households keeping chickens from 42% in the past to 44% at present. There was also an increase in the number of farmers keeping goats from 19% in the past to 22% at present.

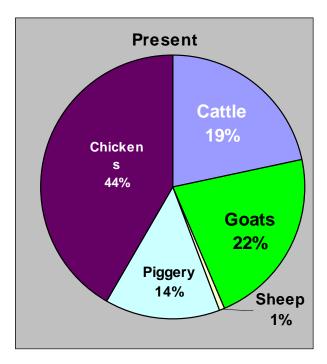


Figure 8(a). Types of Livestock (Present)

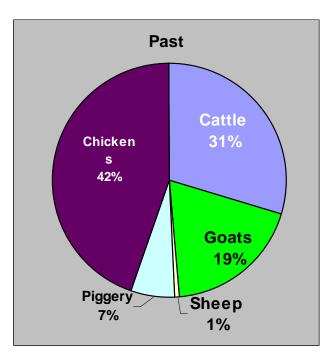


Figure 8(b). Types of Livestock (Past)

Specific Uses of Income from Domestic Productions: Livestock and Poultry

Livestock and poultry were the main contributors to farmers' source of income in Sithobela community.

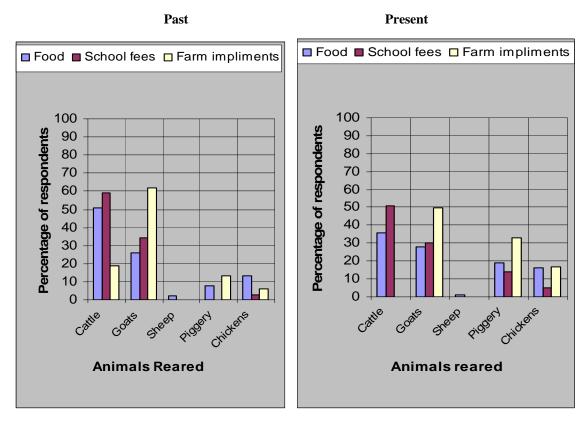


Figure 9: Main Uses of Income from Livestock and Birds in the Past and Present

The results on Figure 9 show that the income obtained from the sales of livestock and poultry was mainly used to buy food and to pay school fees. In the past income from cattle was mainly used to buy food (51%), pay school fees (59%) and to buy farm implements (19%). At present, income from cattle was used only for food (36%) and school fees (50%). Most income at present goes to pay school fees.

Strategies Adopted by Rural Swazis' to Combat Food Insecurity and Hunger in Study Area

It can be seen from Figure 10 that many strategies were used in Sithobela community to secure food security. They were grouped between food crop production strategies (28%) and non-food crop production strategies (72%) includes wage employment (12%), handcraft and/business (14%) and selling livestock and poultry (59%).

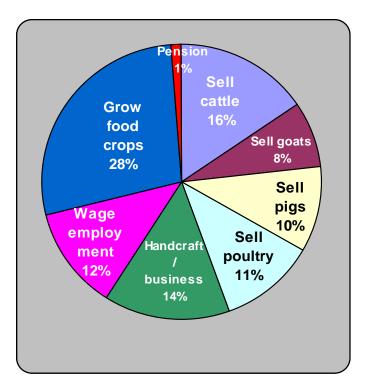


Figure 10: Strategies Farmers Adopted to Fight Hunger and Food Insecurity

Government and NGOs Priorities vs. Rural Swazi Priorities in Hunger Alleviation

Government and NGOs priority in hunger alleviation was to increase food crop production through: crop diversification and growing of drought resistant crops (CASP, 2005): **Cassava, Sorghum, Sweet potatoes and Cowpeas** (MOAC, 2005/2006). The results of the study showed disparities in priorities that change agents -government and NGOs- had compared to those of farmers in the quest to alleviate hunger and food insecurity. The results of the study revealed that farmers' priority was not in crop production but on non-crop production. Both government and NGOs seemed to be unaware of the differences in priorities, as such, government and NGOs continued to emphasis and promote growing of DRCs as first priority while farmers, on the other hand, were not even in crop growing but prioritize non-crop growing sources and strategies.

The Approach Used by Government & NGOs to Alleviate Hunger and Food Insecurity in Study Area

This research was also aimed at finding out the approach used by both government and NGOs to alleviate hunger in Sithobela. The approach may have a significant influence when new innovations are introduced. In the same way, the approach used might have had a significant implication on the quest to alleviate hunger and food insecurity in Sithobela community. Personal communication with senior extension officer (Mr G. Ndlangamandla) in the MOAC in Mbabane; revealed that government had considered drought as a disaster. As such, "we just came out with our own strategies, plans and objectives which we believed could exonerate the hunger situation in dry lands.

In support to government policy on drylands, on the other hand, the study found that NGOs particularly **World Vision**, had implemented projects whose aim was to prolong and improve the quality of life of chronically ill persons and that of other

members of households that were affected by chronic illness. Part of the project involved growing DRCs. The NGO did not involve the recipients when selecting the crops, the projects and even in formulation of the projects' objectives but just explained what the recipients were expected to do.

On the other hand, government projects initiated to achieve food security include: demonstrations on farmers' fields on how to grow drought resistant crops: cassava, sorghum, cowpeas and sweet potatoes, helping farmers learn how to prepare dishes from the drought resistant crops and to provide seeds and fertilizers for farmers to grow these crops (Mr G. Ndlangamandla). The senior extension officer in the Lubombo region based at Sithobela RDA, Mr. Maphiwa Lukhele pointed out that the introduced projects, initially intended to alleviate hunger in Sithobela area were not achieving their stated goals and objectives as it was anticipated because farmers were reluctant to adopt DRCs and the strategies that government had introduced. Mr Gcinokwakhe Lukhele from World Vision attested that farmers were not willing to adopt the newly introduced food crops; as such they did not grow them. Moreover, they did not eat food prepared from these crops.

Introduction of Drought Resistant Crops (DRCs)

The introduction of Drought resistance Crops (DRCs) to farmers was done through seminars conducted by extension officers. In each RDA, 80 farmers were targeted to attend the seminars. It was during these seminars that the notion of growing DRCs instead of maize was introduced to farmers. It was during these seminars again where farmers were taught how to grow and to prepare dishes from the DRCs. On the same note, NGOs also convened meetings in selected drought prone areas and introduced and emphasis growing of DRCs. However, "farmers are reluctant to adopt and do not eat the promoted food crops," (Mr G. Ndlangamandla).

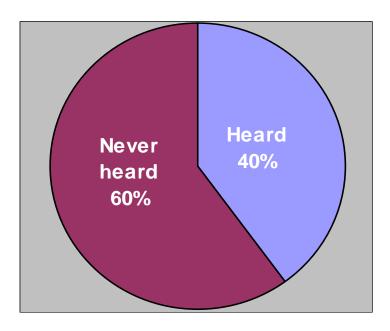


Figure 11: Spread of Information about DRCs to Farmers

When the 72 farmers were interviewed on how DRCs were introduced to them, 60% said they never heard about DRCs while only 40% claimed to have heard about DRCs (Figure 11). Only 30% of the 72 farmers said they attended seminars.

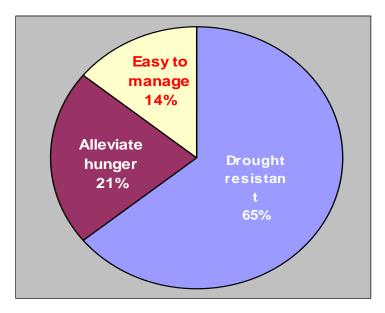


Figure 12: Reasons Given to Farmers to DRCs to Farmers

Those farmers who attended seminars (30%) revealed that they were just told to grow DRCs instead of growing maize as it fails repeatedly but adopt and grow drought resistant crops. The results on Figure 12 show that 65% of farmers were told to grow DRCs because they were resistant to drought while 14%, who attended another seminar on a different day, were told to grow DRCs because they were easy to manage than maize. Also 21% were told that in order to alleviate hunger they must grow DRCs.

The study deduced that government and NGOs approach used to alleviate hunger and food insecurity in the lowveld was the 'top-down' approach because farmers were not incorporated in selection of the crops and in the drawing of the plans and strategies to alleviate hunger. Again the results on introduction of DRCs show that there was no proper planning of how to introduce and to implement the DRCs to farmers.

CONCLUSION

Based on the results of this study it can be concluded that the 'top-down' approach with which government and Non-Governmental Organizations (NGOs) had introduced Drought Resistant Crops (DRCs) to subsistence farmers in Sithobela community has a significant role in promoting the prevalence of hunger and food insecurity in Sithobela community. The approach facilitated lack of collaboration between subsistence farmers and change agents. As there was no collaboration between the two parties, their goals, plans, priorities and objectives do not match. This approach again has caused farmers to reject any programmes and projects by change agents to alleviate food insecurity in the community.

One can also conclude from the results obtained that projects and programmes implemented in Sithobela were not influenced by the beneficiaries instead were influenced by experts knowledge only. Therefore, the 'top-down' approach used by both government and NGOs to alleviate hunger and food insecurity in Sithobela community is not appropriate. An alternative strategy and approach must be used to alleviate food insecurity and hunger in Sithobela community.

RECOMMENDATIONS

The general understanding of achieving sustainable development is through collaboration of both change agents and the recipients of change. To meet the challenge, the approach and strategy with which innovations and new ideas are implemented should be appropriate and should facilitate and promote collaboration. Also specific policy measures are required to address and to provide clear way forward towards initiation of development programmes and innovations

On the basis of the results obtained from this study, one can then draw a conclusion that a lot still need to be done in terms of hunger and food insecurity alleviation in Sithobela community, therefore recommended that government and other responsible and relevant authorities should aim to:

- Promote a substantially revamped 'bottom-up' approach for the success of development programmes implemented
 with the aim to benefit the rural community in which they are implemented.
- Create an enabling environment for recipients of change to influence the direction of any implemented projects that pertain their well being in rural communities.
- Take into consideration all possible rural communities' economic activities; agricultural or non-agricultural. As
 well as help rural people to develop and improve small scale businesses.
- Ensure availability of markets for goods produced by rural people to improve their socio-economic status.
- Encourage collaboration in formulation of goals, objectives, plans and strategies for any development Programme
 in rural communities.

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