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Perceptions on the Impact of METASIP on Food Security in Ghana

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Abstract
The study assessed perceptions relating to the impact of Medium Term Agriculture Sector Investment Plan (METASIP) on food security in Ghana. Specifically, the study monitored perceptions about how far the first pillar of FASDEP II which addresses food security and emergency preparedness has actually contributed to food security in Ghana. Seven indicators were identified and perceptions about these were monitored. They are improved productivity, agriculture mechanization, irrigation and water management, food storage and distribution, improved nutrition, off-farm activities and early warning systems. Findings indicated that, METASIP must do more to guide and sustain its success. More efforts must be put in for improved production, mechanization, irrigation and water management and enhanced off-farm activities by actively engaging communities, households and all stakeholders in the agricultural value chain. This meant adopting a holistic approach in public investment, stakeholder participation and commitment from policy makers.

1.0 Background

The purpose of the study is to assess the impact of Medium Term Agriculture Sector Investment Plan (METASIP) on Food security in Ghana. Over the last two decades or more, global food and financial crises hit the world. Hence, both developed and developing countries have come to accept the need for increasing global food production through increasing investment in agriculture. This has call for a renewed focus and improved investment in agriculture (MoFA 2011 report). MoFA has since developed both short and medium-term policies and programmes seeking solution to the situation. The key policies since 2002 are the first Food and Agriculture Sector Development Policies (FASDEP I) in the period of 2002-2007, the second Food and Agriculture Sector Development Policies (FASDEP II) in the period of 2007 to 2015.

FASDEP I was developed as a policy of the government of Ghana to guide interventions in the agriculture sector which was formulated in 2002 as a holistic policy, building on the key elements of Accelerated Agriculture Growth and Development Policy (AAGDS) with a focus on strengthening the private sector as the engine of growth. Due to limitations of this policy, in 2007, the ministry again came up with FASDEP II which seeks to enhance the environment for all categories of farmers. FASDEP II states the long term policy objectives of government in relation to the development of the agriculture sector aimed at ensuring that the sector's stakeholders are best positioned to take advantage of the emerging opportunities. The METASIP was designed for the period 2011-2015 to implement development policies outlined in the FASDEP II. The objectives of the METASIP are consistent with FASDEP II and therefore clearly outlined the strategy and budgetary requirement for the implementation of FASDEP II (FASDEP II, 2007).

As an investment plan, the budgetary target of METASIP is to increase investment in agriculture to at least ten per cent of the national budget which is in line with the Maputo declaration. The concept of Maputo Declaration came due to food security challenges in Africa in 2003 of which the leaders met in Mozambique to sign a declaration that commit member state to allocate at least ten per cent of their annual budget to agriculture, this declaration is call Maputo declaration. This was to lead to six per cent growth in the agric sector contribution to GDP. To achieve this, the METASIP was to provide an integrated framework to support agricultural growth, rural development and food security. (FASDEP II, 2007)

The Implementation Strategy was to identify the various stakeholders who have interest in the sector. In order to ensure effective stakeholder participation and coordination, a country team, policy dialogue forum and a Strategic Analysis and Knowledge Support System (SAKSS) was established in 2011, (The METASIP p:108). Their role was to provide an advisory support and give direction to Ministry of Food and Agriculture (MoFA) to ensure effective implementation of the METASIP. The objectives of the METASIP were to implement the six pillars outlined in the FASDEP II which were: Food security and emergency preparedness, increased growth in incomes, increased competiveness and enhanced integration into domestic and international markets, sustainable land management and environmental sustainability, science and technology applied in food and agriculture development and improved institutional coordination.

1.1 Problem statement

The METASIP is a medium term investment plan that seeks to ensure that the country is a food secured nation by 2015. However, three years after its implementation, there has not been any known research to show the extent to which the country is progressing towards achieving this aim. It is believed that, this study could provide vital information that can be used to enhance effective implementation and success of the METASIP.

1.2 Objectives of the study

- The study seeks to assess how effective METASIP contributed to food security and emergency preparedness in Ghana. Specifically, the study will assess how FASDEP II/METASIP addressed food security and emergency preparedness in regards to productivity improvement, improvement in agricultural mechanization, improvements in irrigation and water management, improvement in food storage and distribution, improvement in nutrition, effective early warning systems, and improvement in off-farm activities

2.0 Literature review

2.1 Debate on Food Security

The issue of food security is directly linked to the socio-economic development of the geographical area concerned. A number of experts working on the subject of food security have observed that food insecurity in Sub-Sahara Africa is a consequence of development failure, and shown that there is growing evidence that economic growth of a nation alone, does not automatically bring about food security for all (Sen 1981, Yaro 2002, Leach and Davies 1991, Salih 1995, Holtskog 1996).

The Malthusian theory on the relationship between population growth and natural resources formed the foundation of the debate and description of peasant livelihoods in the area of food security, hunger, malnutrition and environmental problems in the developing world. Knowledge of food security and what the concept meant in the early part of the last century depended on simple logic involved in analyzing trends in the population pressure and carrying capacities of places. There have been three shifts in food security studies since the world food conference of 1974, from global, the national to household and the individual (Maxwell, 2001).

According to Chambers, (1983, p.33), there are many more causes of poverty; that a balance of their significance varies over time, by seasons and by countries, regions, communities, villages, households and individuals; and that does not only cause poverty but also brings about opportunity for wealth creation. In order to address the problem in Sub-Sahara Africa, the ECOWAS Agriculture Policy and NEPAD´s Comprehensive Africa Agriculture Development Programme (ECOWAP/CAADP) provided an integrated framework to support agricultural growth, rural development and food security in the African Region.

2.2 Food security

Tolossa, (2006), revealed that food security, as a concept emerged on the international political agenda in 1974 following the worldwide food shortage, and has since been variedly defined by international organisations. According to the FAO, (2002: 4-7), food security is a situation that exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life.

Food security has also been defined by (Valdes 1981, Bigman1982) as the ability of food deficit countries to meet target consumption levels on a year to year basis. Similarly, the World Bank had defined food Security in 1986 as the “access by all people at all times to enough food for an active, healthy life” (World Bank, 1986). Williamson, Jr. (2001:731), had examined food security to embody the “availability, stability, accessibility, sufficiency, autonomy, reliability, inequitability and sustainability”.

According to Williamson, the level of food insecurity in some cases correlates with the level of poverty in the society and leads to famine. Food insecurity thus brings about food price hikes that have had profound impact on non-food inflation of national and global economy at large. Williamson Jr. (2001) further observes that food availability alone does not address the issue of food insecurity. He argues that there are countries with food surplus yet millions of people die in starvation and malnutrition. Access, entitlement and purchasing power of vulnerable groups should be key determinant of food security.

2.3 Investment in agriculture

Over the last two decades global food and financial crises hit the world; most stakeholders have come to accept the need for increasing global food production. To achieve this, requires renewed focus and improved investment in agriculture. According to the MDG report 6 (2007), above situation prompted African leaders to meet in Mozambique in 2003 and signed the Maputo Declaration on Agriculture and Food Security to commit at least 10% percentage of annual national budgets to investment in agriculture which seeks to achieve six percent growth leading to the achievement of the first Millennium Development Goal (MDG 1) by 2015.

African leaders meeting in Abuja for the African Agro Business Summit in March 2010 adopted the Abuja Declaration, and reaffirmed the Maputo Declaration. The Abuja Declaration called on African governments to meet 10% annual budget benchmark by 2015 (MOFA 2010 report). The World Bank report (2008) endorsed and accepted this position. The Government of Ghana in relation with other African governments in 2003 and 2008 recommitted to invest in the sector under the AU/NEPAD Comprehensive African Agriculture Development Programme (CAADP). In October 2009, Ghana signed the ECOWAP/CAADP Compact to support the successful implementation of its Food and Agriculture Sector Development Policy II (FASDEP II). To implement the medium term programmes contained in FASDEP II, the Government of Ghana has developed the Medium Term Agriculture Sector Investment Plan (METASIP 2011-2015).

2.4 METASIP

The METASIP was to implement the objectives outlined in the FASDEP II. The plan was developed using largely participatory process and based on FASDEP II objectives with a target for agriculture sector GDP growth of at least 6% annually and government expenditure allocation of at least 10% of the national budget within the plan period, (MoFA, 2011 report). Above targets conformed to agricultural performance targets of the GSGDA, the ECOWAP of ECOWAS and the CAADP of NEPAD and are expected to contribute significantly to the achievement of the MDGs 1 of the United Nations. The key stakeholders include MoFA, other relevant MDAs, DPs, NGOs, CSIR, the academia, civil society, farmers and other on-farm and off-farm private sector operators, researchers and service providers. According to the 2010 budget statement, the Government intended meeting the costs of METASIP through domestic and international sources of funding. The Government intended increasing its spending on rural development to reach the target of 10% of its total budget, as agreed in the Maputo Declaration.

The objectives of METASIP, in line with the objectives of FASDEP II are as follows: Securing
food security and emergency preparedness; improve growth in incomes; increase competitiveness and enhanced integration into domestic and international markets; sustain management of land and environment; science and technology applied in food and agriculture development and improve institutional coordination, (FASDEP II 2007, P: 23). The priority area to ensure food security and emergency preparedness is the first pillar. This is further divided into: productivity improvement, support to improved nutrition, diversification of livelihood options of the poor with off-farm activities linked to agriculture, Food storage and distribution, early warning systems and emergency preparedness, Irrigation and water management, mechanisation services.

2.5 Productivity improvement

This strategy aims to increase productivity at the farm level to sustainable levels by improving agro-inputs usage among smallholder and subsistence farmers. Data from the Ghana Living Standards Survey V shows that only 5-10% of smallholders with up to 1 ha used fertiliser, compared to 30% of holders with more than 5ha. Twenty percent of the very small subsistence farmers used improved seed compared to 30% of the relatively larger smallholders. The reasons for low use of agro-inputs are high cost and limited availability in isolated production areas.

The strategy to increase productivity at the farm level will include continued research on improvement of priority commodities, sustainable land and water management, integration of crop and small ruminant development, access to irrigation, improved access to appropriate mechanisation, improved access to extension services, increased adoption of Integrated Crop Pest Management (ICPM) measures and linkage to markets ((FASDEP II, 2007).

2.6 Support to improved nutrition

This strategy emphasized production that ensured adequate nutrition of farm and non-farm household members. According to the Ghana Demographic and Health Surveys of 1998 and 2003, the level of malnutrition (stunting of children) increased between 1998 and 2003 even when poverty levels decreased quite significantly. Micronutrient malnutrition levels are confirmed to be quite high suggesting that increase in incomes may be a

necessary condition for decrease in malnutrition. In view of this, nutrition education and advocacy was to be pursued to ensure that people have adequate knowledge and appreciate the importance of both macronutrient and micronutrient malnutrition. Also food production systems were to take into consideration foodstuffs with good levels of both macro and micronutrients. Food fortification was to become an important component of food processing.

2.7 Diversification with off-farm activities linked to agriculture

An analysis of the Ghana Living Standards Survey V data on smallholder production patterns by IFPRI's Ghana Strategy Support Programme (GSSP) shows that subsistence farmers are less diversified in agriculture than relatively larger smallholders. Mean number of crops grown by households with up to 1 hectare was 3 compared to 5 for households with more than 5 hectares. Some of the measures adopted include entrepreneurial training for the youth in the rural communities.

2.8 Food storage and distribution

According to MOFA, (2009) up to 35% of maize and 34% of cassava produced is lost along the chain. This is a major loss and potential cause of food insecurity. Factors associated with losses include limited knowledge on post-harvest handling, poor harvesting methods, poor storage systems, poor access to information on pest control methods and poor transportation methods and equipment in each region for training of producers and other actors (grain traders and distributors) along the value chain. Under the METASIP, emphasis is on reducing theses loses to the barest minimum.

2.9 Early warning systems and emergency preparedness

FASDEP II defined emergency preparedness as the assessment of the country's readiness to respond to the needs of victims of natural hazards and other calamities including climate change impacts. In the case of food it is the ability to provide food to affected persons in times of disaster. Outbreaks of diseases and pests and poor weather (drought and floods) are the main natural causes of emergency food insecurity. Outbreaks of diseases and pests can have major negative effects on livestock and crop production.

The capacity to respond to these emergencies is currently limited (FASDEP II, 2007). The Ghana Meteorological Agency was therefore to provide more localised weather forecast information (including expected rainfall onset, and duration) for each of the regions in the country, and especially the most vulnerable regions. This information was to be communicated to the farmers through the media (electronic and print) and by the Directorate of Agricultural Extension Services to ensure timely land preparation and planting.

2.10 Irrigation and water management

Irrigated agriculture contributed only about 0.5% of the country's agricultural production. Only about 11,000 hectares of land (out of identifiable irrigable area of 500,000 hectares) have been developed for formal irrigation and even the developed area is largely underutilized due to institutional, management, input and other constraints. About 17,636 hectares of land in Ghana are under informal irrigation. Under FASDEP II (2007), the Government was to regard irrigated agricultural infrastructure as a public good, to be leased to water users' associations and/or private management bodies to ensure efficiency through better management practices. Water harvesting for human, animal and plant use needs was to be instituted as a policy and implemented with some priority especially in the savanna areas of the country.

2.11 Mechanization services

About 40% of farmers used some form of mechanization. The most mechanized farm activity is land preparation. There is therefore scope to expand mechanization to other farm activities such as planting, cultivation, harvesting and primary processing such as threshing, shelling and milling. Mechanized equipment for milling is available but processors have limited access to them. Also, the efficiency of the equipment is low and needs to be improved. The quality of locally manufactured equipment and machinery is not up to food grade standard (MOFA, 2005). Specific areas where rain water harvest is a major source of water for farming include Fumbisi, Katanga, Nasia, Nabogu and Soo valleys. Such areas which are also suitable for rice get inundated quickly after the first few rains thereby making the fields unworkable. Because they are large open areas, they are highly susceptible to bush fires. Access to mechanized services in these areas will expedite land preparation before the rains

3.0 Methodology

Primary and secondary data were gathered in the study. The primary data collection employed of a mixed design

involving qualitative and quantitative methods. A questionnaire using a five-point Likert scale (Strongly Disagree, Disagree, Uncertain, Agree and Strongly Agree) targeting policy makers, researchers and stakeholders in agriculture policies in Ghana was administered. There were two focus group discussions with farmers. Additionally, an interview was carried out with a select group (key informants) who were farmers and value chain actors. The Statistical Package for Social Sciences (SPSS) was used to analyze the quantitative data. Secondary data were gathered from the following sources:

- a review was made of food security and poverty in Africa and the role of developed world in the roadmap to food security in developing countries
- a review of reports on global, Africa and Ghana agricultural policies in the last decade
- in depth review of METASIP, FASDEP I & II and other policy documents in Ghana

A major assumption of the study is that: farmers, NGOs, Civil Society Organizations, private and public institutions working to support agriculture have basic understanding of medium term agriculture sector policies in Ghana and will be willing to share their experiences when contacted.

3. 1 Population

A population is the total collection of elements about which we wish to make inference. Our population sizes in this case were: (I) the farmers in the Ashaiman Irrigation Project in the Greater Accra Region, farmers in Juni in the Northern Region. This research targeted all people who could share opinions on the success of the METASIP. It included farmers, other workers in Ghana's agricultural systems and people working in policy making. This study specifically targeted populations who worked in groups, such as those in the Ashaiman Irrigation Project.

Three focus group discussions were conducted for three groups located in Ashaiman and in Tamale. There were also phone interviews that targeted policy makers. In designing the questionnaire, gender and people of different age groups were catered for. This is because projects that targeted poverty reduction have had different impacts on women and men; the youth and the aged. The quantitative approach to the research involves statistical analysis and relies on numerical evidence to draw conclusions.

3.2 Sampling

The sample was taken from the three categories of stakeholders listed above: 40% of farmers in the Ashaiman Irrigation Project, MoFA, 5 people from 5 FBOs, and five people from CSOs each in Greater Accra Region. According to the 2010 population census; the Ashaiman population was 190,971 of which 51% were women. Those involved in farming and other related activities were 30%. 93 of this number are working directly on the Ashaiman Irrigation project. Three focus group discussions were held; Two in Ashaiman and one in Tamale. On MoFA, the sampling frame targeted PPMED and the two persons interviewed were those who are directly involved in policy formulation, implementation and monitoring in MoFA. For the FBOs, a random sampling frame was developed. Cluster sampling was applied to interview three FBOs and three CSOs. The reason for including all these groups of respondents is that they all play crucial but distinct roles in agriculture policies and food security in Ghana.

3.3 Focus group discussion

The farmers were engaged in focus group discussions using open ended questions that tapped their perceptions about the impact of the METASIP on food security in Ghana. The discussions were held for two groups in Ashaiman and one group in Tamale. Each of the first two groups consisted of seven farmers (both men and women), the third group in Tamale were ten in number. There was an interpreter in each occasion because most of them could not speak English.

3.4 Analysis

The collected data for the responses to the variables in a five-point Likert Scale; Strong disagree = 1, Disagree = 2, Uncertain = 3, Agree = 4, Strongly Agree = 5) were tabulated in SPSS v16. For each of the variables, a frequency table, mean and standard deviations of the distributions were produced indicating the opinions of the respondents. Data from the questionnaire were summarized into statistical tables using statistical package for social science (SPSS) software. Means ranged from 1-5. A mean of 5 showed that respondents strongly agreed with statement measuring the outcome, A mean of 4 meant that respondents agreed, a mean of 3 meant that respondents were not sure or uncertain about the statement, a mean of 2 meant that respondents disagreed with the outcome statement and a mean of 1 meant that respondents strongly disagreed with the statement.

3.4 Research limitations

Considering the sensitivity of the topic and the political atmosphere in Ghana; some of the respondents were a

bit hesitant to open up. Notwithstanding, the reasons outlined below may have affected the findings of the study.

- Some farmers did not actually understand issues surrounding the METASIP
- Some respondents were not willing to devoid their time since many researchers came to interview them without a feed back
- Some respondents have little or no knowledge on the agricultural policies in Ghana
- Funding; due to limited resources, the researcher could not reach out to really many communities even though this is action that affected the life's of many Ghanaians in various parts of the country

4.0 Results and discussion

4.1 Biographical information

Majority of the respondents were within the age range of 36-45 who are classified as the youth. It was also observed that 74.2% of the respondents were men and 25.8% were women.

4.2 Productivity Improvement

Results from Table 1 shows that, respondents were nearly uncertain or agreed that there is some improvement in access to fertilizer, seed, information, agriculture extension and credit on their responses to access to fertilizer, seeds, information, agriculture extension and credit. Apart from access to improved seeds (M=4.33) and improvement in access to information (M=3.85) where the means were respectively 4.33 and 3.85 the mean for improvement in access to fertilizer (M=4.15), improvement in farmer extension ratio (M =4.13) and improvement in access to financing and credit (M=4.16), were all above the mean of 4 and shows that most of these respondents were in agreement that there has been some improvement in productivity. This finding seem to depart from an earlier study by the Peasant Farmers Association of Ghana indicating that there is an existing gap between extension officers and farmers.

4.3 Agricultural Mechanization

On mechanization, table 2.0 shows that the average means on increased investment in mechanization (M= 3.31). This means that respondents are not sure about investment being made on mechanization. However, the respondents disagreed that there is any reduction in the cost of mechanization services (M = 1.50). On the introduction of appropriate technology (M=2.70); increased in mechanization centres to address farmers need (M = 2.80); and access to combine harvesters and tractors (M=2.98); the means reveals disagreement to uncertainty about those concerns. This means that respondents either disagreed or were uncertain about improvement in access to mechanization.

4.4 Irrigation and water management

Table 3.0 shows responses given by respondents on questions relating to irrigation and water management for increased production. The mean value (M=4.11) for the measure, "there is increased production during the dry season" reveals that respondents agree that during the dry season they have enough water to

Table 1: Perceptions on the impact of METASIP on productivity improvement

INDICATORS	N	Range	**Mean**	Std. Deviation
Improvement in access to fertilizer	132	4	**4.15**	.953
Access to Improved seeds	132	3	**4.33**	.897
Improvement in farmer extension ratio	129	4	**3.13**	1.221
Improvement in access to information	132	4	**3.85**	1.112
Improvement in access to financing and credit	132	4	**3.16**	.827

Table 2. Perceptions on improvements in agricultural mechanization

INDICATORS	N	Range	**Mean**	Std. Deviation
Increased investment in mechanization	132	4	**3.31**	.934
Introduction of appropriate technology	132	4	**2.70**	1.203
Improved access to combine harvesters and tractors	132	4	**2.98**	1.251
Increased in mechanization centres to address farmers needs	132	4	**2.80**	.949
Reduction in the cost of mechanization	132	4	**1.45**	1.168

continue to produce more food from their fields. On the question as to whether there is rehabilitation of existing irrigation facilities, respondents were affirmative (M=4.23). On the question of whether there is government investment in irrigation facilities, again respondents responded in the affirmative. However, respondents were uncertain with the questions about access to simple facilities for irrigation (M = 3.15) and access to modern technology for harvesting rain water for farming (M=3.20) which shows the respondents position that they might not be aware of any improvement in this area.

Table 3. Perceptions on improvements in irrigation and water management

INDICATORS	N	Range	**Mean**	Std. Deviation
There is increased production during the dry season	132	4	**4.11**	1.222
Rehabilitation of existing irrigation facilities	132	4	**4.23**	1.153
There is Government investment in irrigation	132	4	**4.30**	.994
I have access to simple facilities for irrigation	132	4	**3.15**	1.226
I have access to modern technology for harvesting rain water for farming	132	4	**3.20**	1.009

4.5 Food Storage and Distribution

From Table 4 below on food storage and distribution, the means for improved feeder roads is 2.60, rehabilitation of breakdown agro based industries is 2.90, modern storage facilities to help reduce post harvest loses is 2.91. These figure means that the respondents were indifferent. However, the responses were closer to 3 than 2, which mean that majority disagreed than agreeing. The buffer stock companies not buying surplus products means is 3.05 and systems in place to provide market information is 3.40. Clearly the respondents disagreed that there is any improvement in this area. By this expression, one can consider that there has not been satisfactory improvement in food storage and distribution since 2010.

4.6 Improvement in Off-Farm Activities

From the Table 5, respondents agree to the statement about improvement in youth and entrepreneurship training in their area (M=4.25); similarly respondents agreed to receiving training in entrepreneurship (M = 4.46) as well as to training in value addition (M=4.11). However, respondents were uncertain about incomes generated from outside farming activities (M=3.17) but agreed that access to credit for off-farm activities has improved (M= 3.77).

Table 4. Perceptions on improvements in food storage and distribution

INDICATORS	N	Range	Mean	Std. Deviation
There is improvement in feeder roads networks	132	4	**2.60**	1.145
Rehabilitation of the break down agro-factories	132	4	**2.90**	.972
Modern storage reduce post harvest losses	132	4	**2.91**	1.066
The buffer stock companies and market access	132	3	**3.05**	.995
Systems to provide market information	132	4	**3.40**	.987

Table 5.0: Perception on improvement in off-farm activities

INDICATORS	N	Range	Mean	Std. Deviation
The youth and entrepreneurship programme	132	3	**4.25**	.804
Training in entrepreneurial development	132	4	**4.46**	.952
Training on value addition	132	4	**4.11**	1.002
Income outside farming activities	132	4	**3.17**	1.154
Access to micro credit for off-farm activities	132	4	**3.77**	1.033

4.7 Improved Nutrition

In Table 6, respondents agree that there is improvement in their consumption of vegetables and fruits (M =4.15); and also in fish, livestock and poultry production and consumption (M=4.33) as well as improvements in the introduction of dairy products to their diets (M=4.35). Respondents also agreed that there has been improvement in training in food combinations.

4.8 Early warning systems and emergency preparedness

Table 7 show that respondents are not certain about the presence of adequate systems and capacities at their households to respond to emergencies (M=3.25). Respondents were also not sure about the statement that disaster proof or disaster prone areas have been earmarked to prepare for emergencies (M=3.46). Respondents disagreed that response to disasters have improved in recent times (M=2.11). Respondents disagreed that farmers do receive specific updates on weather forecasts updates (M=2.17) and disagreed that farms are ensured against unforeseen circumstances (M=2.27). Above responses could lead one to consider that there has not been satisfactory improvement in the early warning systems and emergency preparedness.

Table 6. Perceptions on improvement in nutrition

INDICATORS	N	Range	Mean	Std. Deviation
There is improvement in production and consumption of vegetables and fruits	132	4	**4.15**	.953
There is increased in fish, livestock and poultry production and consumption	132	3	**4.33**	.897
There is increased training in food combination	129	4	**4.13**	1.221
I have introduced dairy products in my diet	132	4	**4.35**	1.112

Table 7. Perceptions on improvement in early warning systems and emergency preparedness

INDICATORS	N	Range	Mean	Std. Deviation
There are adequate systems and capacities at household to respond to emergencies	132	3	**3.25**	.804
Disaster proof/ prone area have earmarked by government	132	4	**3.46**	.952
Government response to disasters has improved in recent time	132	4	**2.11**	1.002
Farmers are given updates on whether forecast	132	4	**2.17**	1.154
Farms are now ensured against unforeseen circumstances	132	4	**2.27**	1.033

4.9 Focus Groups

Respondents in the focus group at Ashaiman were convinced that Ghana could achieve the Millennium Development Goal 1 because they noted that food is in plentiful supply and can be purchased at affordable prices compared with the past. They noted "Ghana could achieve the MDG1 if only there will be that needed political will from government to implement development projects. At Tamale, respondents in the focus group discussion, maintained that, Ghana is blessed with all kinds of natural resources ranging from timber, cocoa, diamond, coal, water, good soil, salt, sunlight and above all oil and gas. He added that effective leadership was what was needed to utilize effectively the natural resources Ghana is blessed with.

A respondent from the Ministry of Agriculture's Extension Directorate make contribution on farmer extension ratio, he claimed that the gap is now 1:1,200 (one extension officer to 1,200 farmers) against previously figure of 1:3000 (one extension officer to 3000 farmers. He added that this improvement in extension officer and farmer ratio will solve the problem of providing information to farmers which must lead to increase in yields. These views were not different from that of another respondent from the Ministry of Finance who claimed that Ghana had already achieved the MDG 1 due to good agricultural policies and political will on the part of the government.

In spite of these contributions, a rice farmer from Ashaiman with four children revealed that to him and his

family, life is tough as he had not received any form of support from anywhere. He noted, "now there is policy for everything but mere policies without action on the ground cannot put food on my table nor support my children through school.

5.0 Conclusions

Respondents perceived that METASIP has had positive impact on productivity improvement through improved access to fertilizer, seeds and information. Although respondents did not perceive there was improvement in farmer-extension officer ratio, it was revealed through focus group discussion that the ratio had actually improved to 1:1,200 (one extension officer to 1,200 farmers) against the previous ratio of 1:3000 (one extension officer to 3000 farmers).

This may have contributed to respondents' perceived improvement in access to information. Furthermore, respondents perceive that METASIP has had positive impact on irrigation and water management through the Government's increased investment in irrigation, increased production during the dry season and through rehabilitation of existing irrigation facilities. Respondents perceived that METASIP had positive impact on improving off-farm activities through improvements in youth and entrepreneurship programming, training in entrepreneurial development, training in value additions and in improving access to credit for off-farm activities. Through improvements in production and consumption of vegetables and fruits, fish, livestock and poultry and poultry products as well as training communities in food combination and about the use of dairy products in diets, the METASIP was perceived to have had a positive impact on improving nutrition.

Respondents perceive that METASIP has not made satisfactory impacts in their communities to achieve improvements matching the national average in figures for agricultural mechanization, early warning systems and emergency preparedness and food storage and distribution which are for Ghana to achieve the objective of food security by 2015. At the National level, a 2010 report on the MDG 1 showed that, Ghana has made a significant progress towards achieving the MDG 1. Small scale farmers surveyed perceived that the cost of agricultural mechanization services was far beyond what they could afford and hence did not significantly improve their production. However, a 2011 monitoring report by MoFA indicated that the AMSEC programme at the National level had contributed to improving access to farmers of agricultural mechanization services and raised the average area mechanized by farmers from 5.3 acres in 2008 to 7.8 acres per farmer in 2010, representing a 21 percent per year increase in the area mechanized.

Other challenges highlighted included non-availability of spare parts of most of the machines. Also most of machines were not suitable to the local environment. On irrigation and water management, a need was expressed for micro and small scale irrigation systems in the short- and medium-terms. Even though it seemed that there was some progress made in the communities covered by this study, the coverage of irrigation and water management effort was possibly limited to few communities where the farmlands were closer to water bodies such as ponds, dams, rivers and streams.

On improved food storage and distribution, available data shows that up to 35% of maize and 34% of cassava produced is lost along the chain (MOFA, 2009). Perceptions of respondents gathered from this study seem to indicate that not much have been done to reduce post harvest losses. It was also expressed that there has been some construction of feeder roads but such roads were meant for other purposes as they had not linked farming communities to market centres. On the national buffer stock company, the respondents strongly disagreed it had been helpful in stabilizing prices for farmers. They seem to have the feeling that the initiative is good in fixing minimum guaranteed prices but did not think that the company is able to buy the surplus from farmers at least not in their communities.

From the foregoing account, it is obvious that the METASIP is contributing to food security in Ghana. To sustain it means that more need to be done from improved production through mechanization, irrigation to off-farm activities. There cannot be significant improvement in productivity without improvement in mechanization and there cannot be improvement in vegetables intake in the off-season without irrigation. Similarly, the success of METASIP depends on commitment from the various stakeholders including small scale farmers. It is essential that the state actively engage communities, household and all those in the agriculture value chain. Mobilising resources to fight hunger and deprivation requires a holistic approach. When the State takes the leading role and carry the rest of the stakeholders along the voluntary actions of people at the lower level will become more effective.

From above results, it is obvious the importance of small scale farmers in the implementation of the METASIP were downplayed. A good number of the farmers covered by the study have no knowledge at all of the issues

raised in the METASIP yet they are the target beneficiary.

On the bases of the findings from this study and from review of literature, it is recommended for consistency and continuation in the implementation of government policies employing holistic approaches in the handling of public projects. Four special initiatives by the government were good. The establishment of Agricultural Mechanization Service Centres (AMSEC), National Fertilizer Subsidy Programme, Establishment of Block Farms concept and the National Food Buffer Stock Company (NAFCO). These initiatives should be strengthened to significantly address farmers' problems in the country. Marginalized farmer groups should be given special consideration in the implementation of existing agricultural policies and in any new ones.

This is essential given their circumstances and central role they play in agriculture in Ghana. Achieving this may call for refining the FASDEP II objectives to realistically reflect the true needs of small farmers and take pragmatic measures to ensure the achievement of such objectives. The issue of subsidies should be revisited. It will help for the authorities and development partners to see spending in the agriculture subsidies as investment expenditure against the mindset that subsidy is bad. Removing subsidies slowly kills initiative leaves no room for our resource poor farmers to innovate. Ghana can only make a progress in food security when our governments begin to provide subsidy to place our farmers in a level playing grounds to be able to compete well with farmers anywhere in the world.

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