UNDERSTANDING THE RELATIONSHIP BETWEEN BIOFUELS AND FOOD SECURITY

Biofuels production has met great criticism recently with the argument that the increased production of energy crops for biofuel will lead to a substitution of agricultural resources (land, water, labor, fertilizer) away from food crops, thereby contributing to food insecurity. However according to the feasibility Study for the Production and Use of Biofuel in the SADC Region August 2005, Gaborone, Botswana, food insecurity is primarily caused by economic and weather-based production failures. The failure by farmers and consumers to gain access to adequate food through purchases and trade also lead to food insecurity both at the regional, national and household levels.
It adds that production failures arise mainly from droughts, excessive rainfall, floods, pests and diseases and other natural disasters. Even in years of reasonable rainfall farmers may still fail to gain access to fertilizers and high yielding seed varieties resulting in low productivity and food shortages. At the production level food shortages have generally been attributed to inappropriate policies and economic constraints, which negatively affect agriculture. The study also explains that poor market access and lack of incentive prices adversely affect the capacity of farmers to produce, while high food prices and transport costs limit the accessibility of food by poor urban households and those in remote rural areas. Lack of farm credit and high interest rates invariably work against the achievement of food security objectives. Therefore several strategies will continue to be needed to address food security issues. These include the provision of credit and input packs, incentive prices and farmer training, irrigation development and expanding arable land for crop production. In favor of biofuels production the scholars argue that food security is ‘ACCESS to nutritious food for ALL people by either concentrating on the production of food crops or by having a reliable source of income to access the food in the market. The introduction of biofuels programmes will improve farmer’s income by assuring the market for their crops. It is important to note that introduction of biofuel schemes will not necessarily make farmers stop production of food crops. Some of the energy crops are perennial (such as coconut, palm oil, etc) and this means that once farmers plant them, will never replant in their life time because these crops have a life span of 30-45 years. The study further adds that some of the energy crops such as soyabeans or sunflower are usually planted at the end of growing season (towards end of the rain season) or after harvesting the main food crops such as maize or rice. This implies that farmers will have their main food crop first and then plant their energy crops for extra income to improve their food security. Some energy crops such as cotton is grown mainly for its lint but cotton seeds can be used to produce oil for biofuel production. Such a situation can improve price of cotton hence giving farmers more income. “The biofuel scheme will therefore, not prevent farmers from producing their food crops and instead will improve food security for the household. It has been shown that reliable market of a particular crop is a big incentive to farmers to produce surpluses. Biofuel will provide a reliable market to farmers and hence act as an incentive” it says. To sum up biofuels will contribute positively to food security by helping to address some of the above constraints in the following ways: •Biofuels will attract new investment into agriculture by companies that normally do not invest in the sector, such as petroleum and car manufacturing companies and other investors because of their relatively higher returns. For example ethanol production enhances the value of sugar cane and justifies more investment. •Additional land will be opened and new roads constructed in the biofuels production areas, with spill over benefits on food crops. •Water and irrigation facilities will be installed, which will also be available for food crops and for drought mitigation; •Arable land that is currently under utilized due to lack of markets will be put to the production of energy crops thereby enhancing productivity and creditworthiness of producers and the value of that land; •Seed and fertilizer companies will be motivated to increase the availability of their products in the energy crop producing areas thus assisting food production; •The additional markets, employment and income generated by biofuels will improve the purchasing power of many households; •At the macroeconomic level the foreign exchange savings arising from biofuels will release more resources for the importation of fertilizer, tractors and other imported raw materials. In the event that supplementary food is to be imported there will be less strain on the economy.