

1. Commercialisation of the Dried Product

Agriculture continues to be the most important sector in the majority of African countries. And in other words, the agriculture is the engine for the development of the countries's economy¹.

Therefore the agricultural potential in the five countries can be exploited, and part of the agricultural harvest, will be processed, by using sustainable energy technologies, such as the utilisation of the solar drying technology. This processed product is marketable within the countries or to the export market. The marketing of the dried agricultural products will increase the production, secure the availability of food and create a secure source of income.

Consequently the support to agricultural production & processing, technology develop- ment, transfer and commercialisation is going to be the lynch pin, on which the AREED program approach and development efforts will ultimately hinge.

1.1 The Agricultural Products Suitable for Drying

One of the main objectives of AREED is the popularisation and the commercialisation of locally produced agricultural products, through developing and offering new processing/ preparation methods ready for the preservation, storage, and transformation.

The locally produced agricultural products suitable for drying are available, which is a pre- condition to introduce the sustainable technologies such as the solar drying.

The majority of these products suitable for drying and available at the five involved countries, are listed on the table below:

NR.	Agricultural Products	Country specific	Maturing season	Comments
1	Fruits	Mangoes	Country specific depending on the climate	Part of the fruits mentioned, may not be available at all 5 countries involved, but are country specific
2		Bananas		
3		Oranges		
4		Limes		
5		Grapes		
6		Apricots		
7		Figs		
8		Pineapples		
9		Apples		
10		Plumbs		
1	Vegetables	Tomatoes	Not country specific	Country specific depending on the climate. Some countries harvest a product twice a year, such as the Irish potatoes
2		Cabbages		
3		Onions		
4		Papers		
5		Potatoes		
6		Broccolis		
7		Squash		
8		Asparagus		

¹ In Zimbabwe for example, about 75% of the total population derives its income from agriculture activities, 50% of the manufacturing industry is dependent to some degree on agriculture, and 46% of the total exports are agricultural products.

9		Celeries			
10		Ginger			
11		Garlic			
	Fish	All Kind	Not country specific	Whole year	
	Meat	All kinds	Not country specific	Whole year	
1	Food crops	Cassava	Produced almost at all five countries	Depending on the climate of the country	
2		Maize			
3		Beans			
4		Sweet potatoes			
5		Cowpeas			
6		Millet			
7		Sorghum			
8		Sesame			
9		Groundnuts			
10		Beans			
1	Cash crops	Coffee	Are not country specific	Depending on the climate of the country	
2		Cotton			
3		Sugar canes			
4		Tobaccos			
1	Wood - Products	Timber	Not country specific	Depending of climate	
2		Other of wood	Not country specific	Depending on the climate	

Table 1. Types of Agricultural products suitable for drying

1.2 Market for the Locally Produced Agricultural Products

The agricultural sector in Africa has been affected by severe physical constraints. Such as infra-structural provisions as roads, rail systems and transportation means (vehicles) had tended to favour farmers based in urban areas, while rural areas have generally been neglected. Thus, surplus produce from the majority of farmers can not easily reach the market. The possible solution is to process the harvest by using the solar drying technologies for later selling or for own provision.

Usually the district/region's farmers, especially the small scale farmers produce the same crops, that has limited their ability to make use of all the harvest, and converting this to income generating activities. This is because the regional and especially the local market are seasonally satisfied. Additionally, the farmers economical ability to pay for the transport of the crops and search for the remote or cross border markets, is very limited. Furthermore, they are not quite sure about selling the crops at reasonable price, which will allow them to cover the transport, and have a leftover benefit to cover the needs of the families. The extended family phenomena in Africa, has made the situation even worse, because of the increased family numbers to cater for.

Part of the harvest can be processed using the solar drying technology and stored for late use in the region during the famine.

Information of the needs in the cross border or of the remote market is not available, to make the farmers dare travelling long distance with their harvest. The road conditions and the transport facilities in the region/country, can also be one of the main obstacles for the farmers and hinder them to travel. The sensibility of the products to be transported for a long distance can be a hindrance too. The export market is the one left as possibility. But this requires processed product.

1.2.1. Access to Market

a. The Local, National and Cross Border Market

Many parts of the African countries experienced a famine period, caused by the nature catastrophes, like the droughts, the Elnino-floods or the storm and not to mention the war. In effort to assist number of countries overcome hunger seasons, malnutrition, and to target poverty reduction and generate income, the market² potential has to be exploited and the following recommendations have to be improved or investigated:

- Make sure that the majority of the farmers are not producing the same agricultural products, but different / various types of crops, to ease the selling of the dried products at the area
- Maybe establish a co-operative system to help the small farmers to sell the processed products
- The type of farmers, who are best at certain activities, and which regions are the most efficient in the production of the different commodities, easy to dry and marketable
- The roads condition are satisfactory to transport the harvest for a longer distance than the nearest market place
- The availability of transport means
- Established information and marketing mechanism

b. The Export Market:

The export market for dried agricultural products, such as the fruits and vegetable, has proven to be having a big potential in Europe for example. The case of Nebbi's farmers of Uganda has also proved this assertion (*see the case of Uganda, Annex1*).

The dried agricultural products, such as fruits, vegetables, etc, can support the situation of the food security in most developing countries, especially the sub-Saharan Africa, which is still not stabilised. The export of dried food crops to neighbouring countries or the whole of the African continent, could be valuable source of income for the farmers, and a possible way of increasing the employment.

² Local, national and cross border market

The exploration of an export market for the dried products requires the following:

- A good product quality
- The exporter is able to meet the demand from the importer (the demanded quantity)
- The packaging is up to date, but this can be done in the receiving country.
- Investment in social capitals (investment on fringe benefits)
- Improving the rural roads
- Offering the required and locally suitable processing techniques – Such as the solar drying

The availability of agricultural products to be processed/dried, such as the coffee, cassava, tobacco, fruits, vegetables etc...for further sale or home storage is tremendous. The targeting of the common problems, such as the poverty reduction, the creation of the income generation activities, are related to the better exploitation of the above mentioned agricultural products, locally and nationally.