

The Concepts of Investment for Small-Scale Farmers in Agricultural Sector Using Their Private Farm

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Abstract The purpose of the research is to enhance small-scale farmers into group investors in agriculture sector. This approach is so important because farmers' condition in least developing country is not adequate. Therefore, this research tries to introduce new concept of investment based on piece of farm land, labor and system development. In this research system development consists of land launch policy, profit and loss share policy, common goal design, farmers' transition period settlement strategy, mechanized fertilizer applications, management division, administration system, and other necessary system arrangements. Also here the idea of government financial and material support which includes security and safety policy, providing crops and mechanized farm tools, market access and transportation, pest and disease control system, tax issues, infrastructure, product quality control system, and other supports are necessary.

Key words Joint investment; Agriculture; Small farm land; Local farmers

1 Introduction

As clearly known, agricultural growth reduces poverty and unemployment. Dramatic increases of agricultural output can strength the economy of agriculture-led economy countries. Today, helping small farmers in developing countries is the crucial issue. To help them through agricultural research, extension, and related program specific to their need is also a remarkable task. For this investment is the key focus. Investment is the commitment of money or capital to purchase financial instruments or other assets in order to gain profitable returns in form of interest, income, or appreciation of the value of the instrument^[2]. It has certain level of risk and provides the possibility of generating returns over a period of time. An alternative investment is an investment product other than traditional investments such as stocks, bonds, cash or property^[3]. To 19th century economists, the factors of production were land (natural resources, gifts from nature), labor (the ability to work), and capital goods (human-made tools and equipment). Recent textbooks have added entrepreneurship and human capital (labor's education and skills) VLP^[4]. Land can include ecosystems while sometimes the overall state of technology is seen as a factor of production^[5]. Adam Smith and David Ricardo referred to the *component parts of price*^[6] as the costs of using: land (natural resource), labor, and the capital stock (human made goods or means of production).

Having that in mind, this research tries to introduce new ways of investment for small-scale farmers using their own piece of land and labor.

2 Term of Definition

In this research "small farm land" refers to a piece of land which already exists at the hand of a given farmer (the certified land) based on the law of the concerned country. Since the land, labor and capital in this concept are considered as input into a given investment, thus the researcher believes that a given farmer has his piece of land and labor as initial investment. The remaining is capital.

3 Agriculture-led Economy Countries

There are 49 countries in the world in the least developing list. Almost 37 countries of them have agriculture-led economy^[1] (See Table 1 below). According to this information, the nominal GDP sector composition shows that 37 countries (many of them are from Africa) have an economy highly based on agriculture.

The first fifteen countries: Liberia, Somalia, Guinea-Bissau, Central African Republic, Dem. Rep. of the Congo, Myanmar, Ethiopia, Sierra Leone, Cameroon, Mali, Burundi, Tanzania, Laos, Solomon Islands, and Comoros are highly depending on agriculture which ranges from 76.90~40%. Of course among these countries Ethiopia registered very good economy growth in year 2009. For example Ethiopian Mews (2010) stated on its page the following: Ethiopia ranks among the five fastest-growing economies in the world and is a bastion of regional stability. However the government expected to do a

lot to registered sustainable economic growth.

Table 1 Agricultural Led Economy Countries

No	Name of Countries	Agricultural Sector	Industrial Sector	Service Sector
1	Liberia	76.90%	5.40%	17.70%
2	Somalia	65%	10%	25%
3	Guinea-Bissau	62%	12%	26%
4	Central African Republic	55%	20%	25%
5	Dem. Rep. of the Congo	55%	11%	34%
6	Myanmar	54.70%	10.60%	34.70%
7	Ethiopia	49.20%	9.10%	41.70%
8	Sierra Leone	49%	31%	21%
9	Cameroon	45.20%	16.10%	38.70%
10	Mali	45%	17%	38%
11	Burundi	44.90%	20.90%	34.10%
12	Tanzania	43.30%	17.70%	39%
13	Laos	43.40%	30.60%	26%
14	Solomon Islands	42%	11%	47%
15	Comoros	40%	4%	56%
16	Togo	39.50%	20.40%	40.10%
17	Rwanda	39.40%	23.30%	37.30%
18	Niger	39%	17%	44%
19	Nepal	38%	21%	41%
20	Afghanistan	38%	24%	38%
21	Ghana	37.30%	25.30%	37.50%
22	Papua New Guinea	35.70%	37.10%	27.20%
23	Sudan	35.50%	24.80%	39.70%
24	Guyana	35.50%	19.30%	45.20%
25	Malawi	35.40%	17.60%	47%
26	Kyrgyzstan	34.50%	19.50%	46.10%
27	Cambodia	35%	30%	35%
28	Benin	32.80%	13.70%	53.50%
29	Burkina Faso	32.60%	19.70%	47.70%
30	Chad	32.50%	26.60%	40.80%
31	Marshall Islands	31.70%	14.90%	53.40%
32	Uzbekistan	31.10%	25.70%	43.20%
33	The Gambia	30.50%	13.90%	55.60%
34	Uganda	29.40%	22.10%	48.50%
35	Micronesia	28.90%	15.20%	55.90%
36	Haiti	28%	20%	52%
37	Madagascar	26.90%	16.50%	56.60%

Source: CIA World Fact, 2008 (Summarized by the author)

Now the question is how agriculture-led economy countries like Ethiopia can keep their economic growth with the real change of the life of their nations in general? What sorts of socio-economic and political steps should be taken by the governments of those countries? Many researches propose many solutions from different background. Likewise, this research tries to answer the above vast conceptual question from a single diminution as one, but main solution. That is to say, to suggest small farm land as stock in order to step up from the level of single poor farmers to the level of group well organized farmers, shifting their local farmers to investors through adequate system development. The next part deals about this concept.

4 Joint Farm Land Investment Concept Analysis

As we have seen earlier, the objective of the research is to demonstrate the theoretical concept of contributing small farm land as a stock to establish new mechanized farm through System Development and Government Financial and Material Support. And we have already defined farm land as a piece of land which already exists at the hand of a given farmer (the certified land) based on the law of the concerned country.

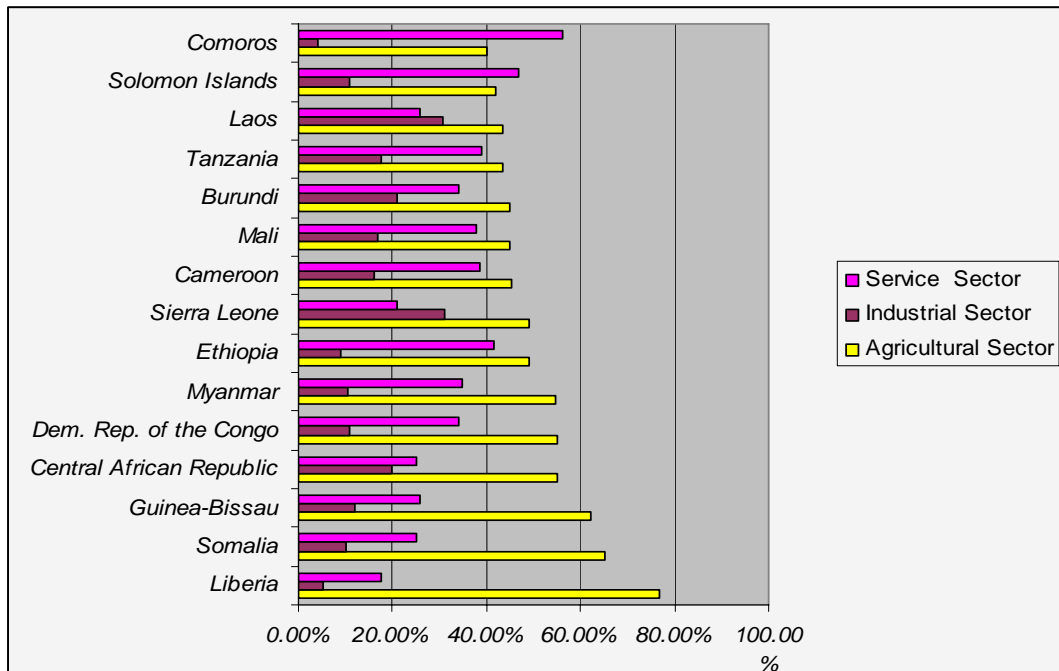


Figure 1 List of Fifteen Least Developing Countries based on 2008 CIA Data

4.1 Farmers’ prerequisites

So now the concept is based on the following assumptions:

- (1) Farmers who are living the same district
- (2) Farmers who share the same culture and living conditions
- (3) Farmers who have common language as means of communication
- (4) Moreover farmers have piece of farm lands in the same geographic area
- (5) Farmers who have willing to join other for the same goal

And other situational prerequisites needed

4.2 Government’s role

In this research system development consists of land launch policy, profit and loss share policy, common goal design, farmers’ transition period settlement strategy, mechanized fertilizer applications, management division, administration system, and other necessary system arrangements are needed. Also the idea of government financial and material support includes security and safety policy, providing crops and mechanized farm with tools.

(Tractors and other related machines for specific time-usually till the farmers stand with their two legs), market access and transportation, pest and disease control system, tax issues, infrastructure, product quality control system, and other necessary supports needed from the government or NGO’s (See Figure 2 below).

5 Findings

This kind of investment can be established through contributing pieces of the farm lands and labors which are already exist at the hand of the local farmers. According to the basic concept of this research, the farmers will share their lands and will make coalition. Then by using system development and government financial and material support, they can establish their own independent mechanized farms.

5.1 Giving Symbol and Terminology

In this research, farmers are expected to live in the same area; same culture, and have common language.

Farmer = symbolized as *F*; Then we can find F_n (where *n* is equal to number of farmers)

Government Support = symbolized as *GS*

Land Investment = symbolized as *LI*

Labor = *L* (Take as it is which is already existed)

Farm Land = symbolized as FL

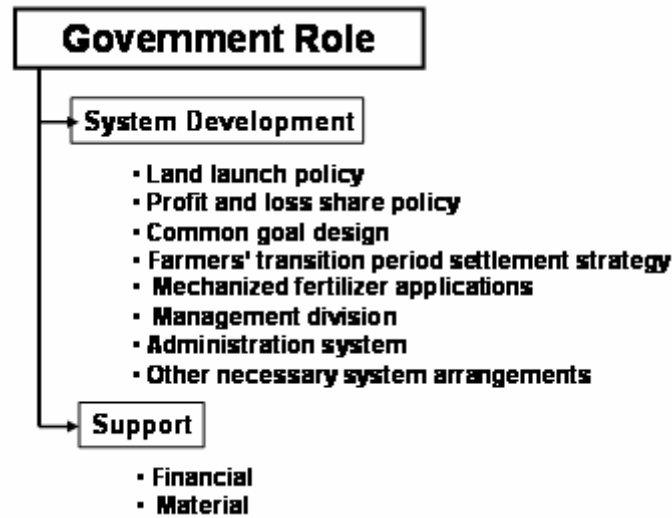


Figure 2 Government Roles in Joint Piece of Land Investment

From the above we can develop the following conceptual equation.

$$\text{Land Investment} = [(\text{Farmland} + \text{Labor of } F_1) + (\text{Farmland} + \text{Labor of } F_2) + \dots + (\text{Farmland} + \text{Labor of } F_n)] + \text{Government Support}$$

Therefore, $LI = [(FL + L)^{F_1} + (FL + L)^{F_2} + \dots + (FL + L)^{F_n}] + [GS]$; Where $n =$ any counting number.

And this can be useful to determine the amount of investment to register the initial input (Farm Land and Labor in this case).

Based on the above analysis, if the joint pieces of farm land to establish investment on agricultural sector is applied in a given country the expected outcomes are not simple. Apart from upgrading the living condition of each farmer there could be a number of economical, social and political advantages for that particular country. This can be done by resettlement of farmers from scattered houses to collective and modern building. And this leads the country to transfer from totally agriculture depending economy and unorganized way of life to a modernized and industrialized life. And this can help a lot the nations to found meaningful urban facilities.

6 Conclusions

Farm mechanization plays a significant role in every nation's economy. Particularly it is a key solution for countries which have no sustainable food security and economic growth. Many of these countries are found in Africa. The economies of those countries are mainly depending on the agriculture sector. This research can give a new way of thinking which can show a short-cut to transfer from an agricultural sector led economy in to a mechanized farm (semi-industry sector economy) without affecting environment and living trend of the nations. And this directly or indirectly positively affect the growth of economy of those countries and it can assure sustainable food security of the nations. This also can reduce conflicts within the nations and it can bring stable political atmosphere within the country. This by turn can help to bring sustainable economic growth and development to those nations.

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