**DEPARTMENT OF ECONOMICS**

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# INTRODUCTION

## Concepts of Rural Development

The concept of rural development is built of two sub-concepts; i.e. rural and development. So it is natural to define the sub – concepts separately in order to understand the inner core of the subject matter.

* **Development**: Given the lower per capita income which characterized the newly independent nations of Africa, Asia and Latin America in the early 1950’s and 1960’s; it was argued that the achievement of development is as simple as achievement of sustained economic growth. Intentionally or unintentionally the economist of that time were making **general development** as synonymous to **economic development**, in general and **economic growth**, in particular. That is;

**Development = Economic development = Economic growth**

This is based on two assumptions about the process of economic development:

1. Growth will trickle down overtime from those with higher capability towards those with lower capability. This means economic growth will result in economic development.
2. Income is the main determinant factor for achievement of overall development. If people are having more income and if government is collecting more taxes; the other non–quantitative aspects of development such as improvement in health, education, value system and others will automatically follow.

If improvement in educational attainment, health status, life expectancy, social structure, value system & etcetera are highly determined by income of the people, we can indirectly improve them by improving the per–capita income of the people. After all the rich is well fed, healthy, educated & well respected & given the fact that the immediate manifestation of poverty is to be observed in the low per–capita income, it seems win–win situation to address the income poverty directly & other manifestation of poverty will disappear. And if trickle down is effective, it does not matter who is benefiting in the short term (which is more often the rich & capable); given the fact that the benefit will trickle down to the poor & the poorest of the poor in the middle & long run.

**Rationale of the above assumptions made:**

* When the rich get richer, he/she will be able to create employment opportunity to the poor. That is, when high potential areas produce more crops, they will create both employment opportunities to surplus labor from low potential areas and will produce cheap food items.
* One way or in another, the real purchasing power of the people in both high potential and low potential areas will be improved.
* Further, when industries are congested in city centers with well developed infrastructure and when they able to develop all necessary business skills they will create subsidiary and main branches in areas with low wage rate and possibly high transaction cost.
* Thus, it is well documented fact that underdeveloped areas which are located near to advanced economies will grow faster than others due to flying geese pattern. If we compare European and Asian former USSR countries, the European ones were able to achieve better development due to their closeness toward advanced west European economies compared to the Asian ones which are neighboring developing economies. Therefore, the assumption that having rich neighbor is beneficial in the long run. So nothing is wrong with making economic development and growth as synonymous as development for the early period economists.

**The shortcomings of the assumptions:**

* The first problem is long run is very long. Giving the flying geese pattern, in the long run development is natural to trickle down not only from reduced general price level and improved employment of surplus labor, but from outsourcing of industries in search of cheap labor and increased cost of congestion. But in short and middle run, the laborers that migrate to high potential area could be the well educated and the more dynamic younger population. Moreover, given the existence of external economies for the firm within the same industry and between different industries, the out source of industries could be very limited. So the external diseconomies of crowdedness and increased labor cost may take longer time to over the link between income and other element of rural development is not as strong as it is assumed first. If you give some money to the street children, you don’t expect him to spend it in going to school, health or other related elements. This means you have to generate very large amount of increase in income if the impact of income improvement is to have strong effect on other elements of rural development. That is, we have to wait for very long run, and this could be unacceptable to the non – rich part of the society, which have to wait for the trickle down and significant increase in income.
* The serious problem is to be found in the fact that improvement in income not only effect improvement in other elements of rural development but also that the improvement in income is conditioned in the achievements of other elements of rural development. For example, **education and health are a series pre-condition for improvement of productivity in both industry and agriculture**. So the two assumptions which are used to make growth as synonymous to both economic development and general development are unrealistic; especially in short and middle run. However, the long run is very long in which all of us can be died.

Therefore, it is insisted that the above quantitative definition of development needs a qualitative qualification. This means we need to consider not only improvement in income, but also improvement in health status, nutrition, education, child mortality, life expectancy and so on. So it is insisted that development implies growth (economic or real income growth) plus change. The change is to account that the quality of life and production capability of the population need to be improved. Moreover, it needs to make clear that economic development is not necessarily synonymous to general development.

* **Economic development**is defined in early times as economic growth (adjusted for population growth) and then it is modified to include structural change (improvement in method of production and sectoral importance). But currently it is defined as improvement in **quality life of the national population**. This implies **both per-capita growth in income and better income distribution**.
* However, **development** includes **social**, **cultural** and **political** development in addition to **economic** development. So we can go back to the second definition that development as growth (economic growth) with change. Moreover, the word change could imply all qualitative non-income changes in development like improved health, nutrition, education, life expectancy, gender equality and so on.

The main problem that can creep is that if a given population desires to have lower formal education compared to other nations (regions). Does it mean they are under developed compared to the others? If someone desires short and painful life in order to prepare him for next life, can we say he/she is under developed compared to others. So it is logical first to focus on quality of life as measure of development. So developments need to imply desired change in quality of life and what is desirable will be the function of time, space and culture. This is because the fact that what is desirable at given time, space and culture could be undesirable at other time, area, and culture. So if we can make the definition of what is quality of life as subjective issue to be specified by those for whom development is to be achieved, our definition can stand the test of time and changing values.

**Given this fact in background we can define development as universally cherished goal of individuals, families, communities and nations all over the world.**

**Development** needs to be sustainable not only over time but also over generations. It means improvement in quality of life of the population for few years, say due to coffee price boom or business cycle could not qualify as development. But far more important, it needs to consider inter–generational equity.

**So we can define sustainable development as desirable change in quality of life of the current generation without compromising the ability of the future generation to do so**.

* **Rural**:Generally, we can use an **area where the majority of the population is primarily engaged in agriculture as rural** or we can use **a threshold density of population to identify a given area as rural or urban**. This means if the **majority of the populationdepends on agriculture** for making a living or when the **density of population** is below some minimum acceptable density, we can **call the area as a rural area**.

Why do we care about rural area as special point of study if the identification of rural area is simply related to population density and high dependence on agriculture?

* First, given a low population density, the cost of social amenities, administrative and distribution of private goods will be very high. So the level of market and state failures will be very huge in rural areas.
* Far worst, given a low population density, the lobbying power of the rural population will be very weak. And this will result in urban bias in availability of infrastructure, social and administrative services. And this will increase the level of market failures given high transaction cost and high uncertainty. In such environment, the achievement of desired change in quality of life of the population by the market or other development forces not only will be very hard business but also very complicated.
* Moreover, agriculture by itself has very distinct problems associated with high dependence on nature, long gestation period, and output and price uncertainty. This coupled with the state and market failures will make the achievement of development in low density and agricultural oriented rural areas very hard business. This is why the process of development in addition to the final achievement of better quality of life is needed to be emphasized in the definition of rural development.

Therefore, **rural development can be defined as, a process leading to sustainable improvement in quality of life of the rural population.** Note that quality of life is subjective and it can include higher income, better health, higher life expectancy, self respect, political freedom and whatever the people wish to have. But it is important to note that when we try to achieve a subjective improvement in peoples’ quality of life, one objective may stand in a way of other more important objective. Say the people desperately need food but also have a habit of spending significant part of their time in unproductive activity. In such case, we don’t only have to respect their choice but also we need to change their attitude, customs and beliefs too.

* **Scope of Rural Development**

Development is compromised of social, political and cultural development in addition to economic development. And the definition of rural development that we adopt states that rural development as a process in which the rural quality of life is improved in sustainable manner. And rural life is highly related to agriculture but it is much more than agriculture. And the implication is that if we need a sustainable improvement in rural quality of life, we will need to improve a wider rural life than mere agricultural income.

Even if we focus on development of rural economy, rural economy is far wider than simple agriculture development. But improvement in politics will need the establishment of proper institutions, peoples’ empowerment, improvement in education and value systems and others. Socio–cultural development will need investment in human capital, gender equality and preservation of local identity and values. So rural development, which is aiming to improve the quality of life of the rural mass–in its totality, need to achieve more than agricultural and economic development.The ways to approach the scope of rural development are:

1. In terms of **activities**that are needed to bring sustainable rural development. These are:
2. Productive activities (sectors); like on-farm and off-farm activities or sectors;
3. Enabling activities (environment), which include marketing, infrastructure, level of market development, legal environment, government system, gender and environmental policies;
4. Broader activities (social services), which include education, health, water and sanitation, and so on.
5. The **nature (type) of capital** that is needed to bring development including:
6. Human capital: indicates level of education, health status, nutrition status, and so on.
7. Social capital: shows the level of trust and will of community members to be regulated and coordinated by informal community rule.
8. Public physical capital: are roads, irrigation facility, ICT, and so on.
9. Institutional capital: are organizations and rules which coordinate the activities of individuals when both state and market fail. Examplesare: MFI, land tenure, value chain, and so on.
10. Private physical capital: shows the machinery, labor force, land, and so on.
11. The **pattern of change in rural quality of life**:

The scope of rural development is determined by the definition of quality of life or functioning of rural poor. This functioning include to be well fed, well educated, well clothed, to be healthy, to be free from any form of serfdom, to have self respect, and so on. So the scope of rural development assuming rational agents could deal with access to wide variety of capabilities to achieve different functioning. This include availability of educational facilities, health facilities, income source, good working markets, political freedom, lack of any formal or informal institutions to depress self respect, and so on. But if the level of rationality of the people is questionable, it could deal with actual being healthy, being educated, being free, having self-respect, being well fed, and well clothed and so on.

## Socio-economic and Cultural Factors in Rural Development

### Population and Rural Development

The consequences of population growth on economic development have attracted the attention of economists ever since Adam Smith wrote his “Wealth of Nations.’ To Adam Smith, ‘The annual labour of every nat

n is the fund which originally supplies it with all the necessaries and convenience of life’. It was only Malthus and Ricardo who created an alarm about the effects of population growth on the economy. But their fears have proved unfounded because the growth of population in Western Europe has led to its rapid industrialization. Population growth has helped the growth of such economies because they are wealthy, have abundant capital and scarcity of labour. In such countries, the supply curve of labour is elastic to the industrial sector so that even a high growth rate of population has led to a rapid increase in productivity. However, the impacts of population growth on developing countries and in particular with regard to rural development are not that much encouraging.

The consequences of population growth on the development of rural economies are not the same as what we mentioned above because the conditions prevailing in the developing countries are quite different from those that in the urbanized developed world. The rural economies are poor, capital–scarce and labour–abundant. The population growth adversely affects their economic development in the following ways:

1. Faster population growth makes the choice scarcer between higher consumption now and the investment needed to bring higher consumption in the future.
2. Rapid population growth tends to over use the rural economies’ natural resources. This is particularly the case where the majority of people are dependent on agriculture for their livelihood. With rapidly rising population, agricultural holdings become smaller and non-remunerative to cultivate. There is no possibility of increasing farm production through extensive cultivation, in particular in overpopulated developing countries. Consequently, it will affect the poverty-stricken rural economies. In fact, rapid population growth leads to the overuse of the land thereby jeopardizing the welfare of future generations.
3. With rapidly growing population, it becomes difficult to manage the adjustments that accompany economic and social changes. Besides, growing population threatens permanent environmental damage through urbanization in rural areas.

In LDCs, people mostly live in rural areas and agriculture is their main occupation. **With population growth**, the **land–man ratio is disturbed**; pressure of population on land increases because the **supply of land is inelastic**. It adds to disguised unemployment and **reduces per capita productivity** further. As the number of landless workers increases, their wages fall. Thus,**low per capita productivity reduces the propensity to save and invest**. As a result, the use of improved techniques and other improvements on land are not possible. Capital formation in agriculture suffers and the economy is bogged down to subsistence level. The problem of feeding additional population becomes serious due to acute shortage of food products.

Rapid population growth leads to environmental damage in rural areas. Scarcity of land due to rapidly increasing population pushes large number of people to ecologically sensitive areas such as hillsides and tropical forests. It leads to overgrazing and cutting of forests for cultivation leading to severe environmental damage. Moreover, the pressures of rapid population growth forces people to obtain more food for themselves and their livestock. As a result, they over cultivate the semi-arid areas. This leads to desertification over the long–run when land stops yielding anything. Besides, rapid population growth leads to the migration of large numbers to urban areas with industrialization.

### Gender and Development

Young identifies the key element in Gender and Development (GAD) approach as being pivotally, a more holistic perspective of looking at the ‘totality of social organization, economic and political life in order to understand the shaping of particular aspects of society’ (Young cited in Rathgeber 1989:6). Consequently, the GAD movement as a whole is marked by its identification of the relevance of gender roles, relations, and needs in determining the subordinate status of women in developing countries. The presence as well as absence of both men and women counts in GAD analysis, as does the type of interaction or lack of interaction between the two sexes.

The GAD approach is more partial towards the contributions of men who are seen as potential partners in the development project who share a comparable concern for gender equity and social justice (Abeyasekere: 1999:44).Much of the early literatures on GAD converge on unequal gender relations within the family or in the domestic sphere. However, from the mid–1980s onwards, the literature focuses on the manner in which these same imbalances are replicated in the public spheres of the political, social and cultural institutions. This new genre of feminist work on gender, attempts to expose "the false impersonality and deceptive objectivity of organizing principles based on so called neutrality of public institutions and interactions" especially in development institutions (Miller and Razavi: 1998:2), and demonstrate the hierarchical and unequally ‘gendered’ formations that are essentially against the women’s gender interests. For example, Razavi (1998:27), points out this shift in perception with reference to development policies by stating that:

*Rather than focusing on how structural adjustment programs have affected the welfare of women and children, their aim is to show how gender biases and rigidities affect adjustment policies and can ultimately frustrate them. Today, Gender and Development has become a project to de-institutionalize gender bias in the public sphere. To this extent, gender is an insider approach. By promoting the “organized consciousness” of Gender, GAD also envisions the increase in women’s access to politics and other decision-making areas and the reorganization of gender relations in the public sphere. At the same time, GAD supports the redefinition of the existing divisions in labor, so as to bring about a shared work culture within the public and domestic spheres by bridging the gap between the private and the public. As such, a positive development of the Gender debate is its heightened awareness of the reproductive role and responsibilities of women.*

## Elements of Rural Development

Elements of rural development can be identified from three directions or schools of thoughts:

1. **The Welfare school of thought**:

Thisfocuses on some major factors of economic development and it makes **welfare to be a subjective psychic satisfaction** that somebody gets from goods and services. And this can be presented by **income and expenditure** as **proxy to utility**. So development or economic development is defined as sustainable increase in per-capita income of the population. But imagine you got all the money in the world and nobody is there to supply you goods and services. So even making the assumption that **utility can be indirectly measured by income**, we need to **make another unrealistic assumption that there are no serious market failures and incomplete markets in rural areas.**

* Welfare school elements of rural development are**: Income per-capita**
* **Expenditure per–capita**
1. **The basic needs school of thought:**

It argues that before anyone can be **‘Well’** he/she need to **‘be alive’**; so in rural area of the developing world where access to the basic needs of life is very low, elements of rural development need to focus on the aspects of the basic needs. This means they need to focus in access to basic goods and services, political freedom and self-respect.

The Basic needs school of rural development include**: Basic needs of life**

 **Freedom**

 **Self respect**

Basic needs of life include food, water, shelter, primary health service and primary education. Moreover, freedom implies both economic and political freedom among other things. But the two problems of this school are that there is no general consensus in what considered being basic needs of life. But far worst, it does not consider that the outcome is both the function of capability and choice. If Mr. ’X’ wants to be a priest and Mr. ‘Y’ to be a doctor and both follow their own dreams, how in earth can we say either ‘X’ or ‘Y’ is better than the other?

1. **The Sen’s capability school of thought**:

It is a more appealing school of thought and defines life in terms of interrelated functioning which consists of doing and being. Therefore, well being or quality of life is measured by availability of **capabilities**that enable someone to achieve some functioning. And this is **deeply rooted in the idea of free choice**; in which if someone has full access to achieve some functioning but failed to achieve them due to its free choice, we should not judge him/her to lose any welfare. Indirectly, this school assumes there is an acceptable level of personal rationality on making judgments compared to any other available alternative (say expert judgment). So what we have to see is the capacity to achieve some functioning’s (say being well feed) not the actual function. So capabilities are ability of an individual to choose among given functionings. Functionings are related to person’s ability to perform some doing and beings, like being healthy, being educated, being well feed, being able to participate in political and social life of the society, and so on.

So the capabilities school’s elements of rural development will be:

1. Access to sustainable and acceptable level of income
2. Availability of well functioning markets
3. The availability of good quality of hard-and soft-infrastructure
4. Availability of social services at convenience of the customer (cost, distance, quality & so on)
5. Free and safe access to political life of the country
6. The existence of social norms and values which encourage self respect, and so on.

Assuming that how imperfect they are, individuals are the best judges of their own welfare, this school has a theoretical edge over both schools. This is because first the welfare school deals only with the first capability needed for achievement of acceptable consumption of goods and services and it is completed here. Second the lack of allowance for personal choice which is observed in basic needs school is addressed here.

However, if the rationality of the citizens can be questioned, we may need to deal with the actual achievement of both basic and non basic needs of life. Suppose, Mr. X may have higher income and live in metropolitan with good infrastructure; however, he spends his money on gambling than improving his quality of life and what this school is saying is that: he prefers gambling to eating because gambling is more important to him than eating. The worst is the measurement of capability is more tedious and difficult compared to actual achievement, which puts this school in comparative disadvantage from practical point of view.

# INSTITUTIONS FOR RURAL DEVELOPMENT

## Definition, concepts and economic importance of institutions

Institutions are laws, social norms, traditions, religious beliefs and values, which determine the relationship between economic agents (individuals, households, firms, countries and so on) and economic agents and their environment. Institutions are sanctioned by community, by state or/and by other economic agents to coordinate the efforts of each and every agent towards specific goal. Institutions can be **formal**, *as sanctioned by law*, or **informal**, as *sanctionedby social norms*. It is always important to remember that informal institutions are as important as formal institutions. This is so, given the fact that “rules that contradict the moral of the people would not be sanctioned socially and, if stipulated formally, would not function effectively” (Haymai, 1997). This is because socially rejected institutions will demand huge enforcement cost to be practical.

Let’s see the following **formal-and informal-institutions** as example:

|  |  |  |
| --- | --- | --- |
| **Institutions** | **Nature** | **Effect on economy** |
| Private property will have protection under the law  | Formal  | It will promote capital accumulation, entrepreneurship, innovation, self development, risk taking and so on.  |
| It is not right to steal anybody’s property  | Informal  | It will make the formal rules that protect private property very effective; if formal rules are absent it will substitute them  |
| Exchange of private property has to be by freewill of each party involved  | Formal  | It will improve market efficiency by making reward proportional or equal to effort and will make exchange win-win situation  |
| It is not right to force someone to trade his personal possession  | Informal | It will make the formal rules that protect private property very effective; if formal rules are absent it will substitute them |
| Every person has obligation to pay tax | Formal  | It will improve the provision of public goods by promoting the supply of public goods |
| It is wrong to evade income tax | Informal | It will make tax enforcement very effective |
| Seedlings have to supply the basic needs of their senior parents  | Informal  | It will generate social security for old age  |

In simple words, institutions are needed to organize diverse economic agents into functional body, called organization. The organization can be family, firm, ministry, market, state, and so on. Organization is a functional body or group organized to act for specific purpose.

**The two important organizations, for economics, are market and state.**

🕮Market will organize the self-motivated act of economic agents toward maximization of social welfare, using the invisible-hand of competition. Producers are producing to maximize profit, individuals are trying to maximize utility, workers are trying to have better paying job with better working environment, and countries are trying to have more foreign income and more inflow of foreign investment and so on.

Over all welfare or social welfare is maximization can be granted by invisible–hand of the (perfect) market or market competition. That is why (perfect) market is taken as organization of economic agents with objective of social welfare maximization. Viewed from different angle, market is built from matrix of rules (institution), which coordinate the self-promoting act of individuals towards social welfare maximization. This is done by competition using **prices as shooting star** to guide agents toward the need direction. When people need more bread, they will pay more for it. As result price of bread will increase. Producers, in order to maximize profit, will start producing more bread at least cost possible. If they are not using the least cost combination of inputs and technology, competition will force them out of market. As a result, more breadwill be produced in least cost possible. This will result in maximum welfare possible, given the limited resources at society’s disposal. However, viewed from different angle, market is a complex matrix of institutions.

If institutions are well defined and enforced, they will provide optimal signals to coordinate egocentric action of individuals to make it compatible with maximization of social welfare. Not only institutions will guide agents’ effort in the right direction, but also will introduce certainty on future outcome of current action. A farmer will only crop his land optimally, if and only if he/she is assured that he/she is the sole owner of his/her effort. People will be willing to save and lend to somebody, if and only if they know that they will be paid back with interest. In general, institution of private property will make both saving and production socially optimal by providing assured rules, which govern the relationship between agents and agents, and their environment.Efficiency of market as organization, which is the main focus of main stream economics is the result of its institutional efficiency. In simple words, **market is both organization and institution**.

As can be shown below, if market is perfect, as assumed in main stream economics/neoclassical economics, it is the only institution needed to coordinate the rural development effort, in specific and general development efforts. Let’s explain the above orthodox view below:

## Market allocation and market failures

Any neo-classical microeconomics or welfare economics text book will show us that under its assumptions; free market is Pareto-optimal. The central assumptions are:

1. **There are large number of buyers and sellers:** everyone will take the market price as given and he/she is price taker in the market. Nobody will have the power to fix price, which is determined by market demand and supply (collective action of all participants).
2. **There is given and fixed technology:** in the economy technology is given and anyone can use that technology without any restriction.
3. **There is perfect mobility of factors of production**: factors of production, like capital, labour, land, and raw materials, can freely move from one firm (location) to another without any need of additional cost.
4. **There is perfect information**: there is perfect information about price, output, market demand, and supply level, and so on. This means, there is no risk and judgment is done under perfect information.
5. **Entry and exit is free for all**: since there is free entry and exit, nobody can earn any abnormal profit and only the fittest (the one with best quality products and least cost of production and marketing) will survive.
6. **There are no public goods and externalities**: all benefits and costs are accruing to those who are responsible, either for consumption or production of the goods and services.
7. **Economic agents are rational**: human beings are making the best possible decision on time use, production, and consumption and saving after considering all important information.

The market is Pareto-optimal when the following three conditions are fulfilled:

1. **There is Pareto-efficiency in consumption**: it is not possible to increase utility of customer by changing the composition and quantity of goods consumed by the customer. This means customers are generating the best possible utility that can be generated from the limited resource that society possesses.
2. **There is Pareto-efficiency in production**: it is not possible to increase the level of production by improving technology, input composition, and efficiency of input use. This means what can be produced from the limited resources is already produced and there is nothing that can be done to improve it further.
3. **There is Pareto-optimality in distribution**: goods and services that can be produced from the limited resources are produced and distributed optimally. This implies there is nothing that we can change to make someone better-off without making another person worse-off. In other words, the institution needed to achieve rural development is market only.

Thus,free market provides optimal inputs to the rural residents and will create optimal market for their output demanded by the people. If these assumptions are right, **rural and national development could be as simple as letting the market free or getting the price right.**

In reality, free market has shortcomings because it is mathematically perfect, but practically less relevant theory of neoclassical economics. The shortcomings of the perfect market approach can be classified into **traditional market failures and non-traditional market failures.**

### Traditional market failures

1. **It assumes away the existence of externality**: given negative and positive externalities are widely observed in any economy, market allocation will not result in the best possible resource allocation/Pareto-optimal.

**Negative externality:**this is the case whereSocial Marginal cost is greater than private marginal cost.This implies the private sector will pay for cost of labor, land, capital, and other private costs, but it may fail to cover the cost related to river pollution, air pollution, and other negative externality exerted on people, and the environment.**Positive externality:**implies Private marginal benefit is less than social marginal benefit. Education, health care, skill development, research and development will not only benefit the person who is paying for them, but also the wider society.

Both cases are clear indication of the fact that private benefits and social benefits are different due to externalities; thus market allocations will not result into Pareto-optimal or the best possible resource allocation. Therefore, state can use tax and/or subsidy, to improve market allocation.

1. **It assumes away the existence of public goods and services:** private goods and services are **rival** and **excludable** in character. If bread is consumed by you, nobody else can consume it. So it is rival good. Moreover, you can easily exclude others from consuming your bread. That is, why bread is a private good. However, think about a light house, which is used by direct sailors in the mid sea towards dry land. If one person built a light house, his use of the light house will not limit the use of the light house by others, and the vise verse. This means, light house is not rival service or many people can use the same service without increasing cost. Moreover, once the light house is built, it is not possible to exclude others from its use. In other words, light house is non-excludable service. This is why light house is a public service.

Public goods and services are goods and services which are non-rival and non-excludable in character. Public goods and services include policing, public administration, defense, infrastructure, and so on. For these goods and servicesprivate allocation will result in sub-optimal resource allocation and the state has to supply them by imposing mandatory taxes. Market forces will not give an optimal incentive for each person to pay for optimal level of public goods and services. Let assume the public good is road. And the optimal level is 10 Km; where 7 Km is demanded by Bilisuma and 3 Km by Ayansa. Now let us assume Bilisuma built 7 Km road. What does Ayansa has to do to maximize his benefit? He can use the 7 Km built by Bilisuma, which is more than what is demanded by him or can pay for additional 3 Km, which has no value for him. Logically, without paying for additional road construction, he has to move his business toward the road constructed by Bilisuma. As result, the market will only supply 7 Km road. This can be observed in actual behavior of people. People normally reject to pay more tax for road construction, but if road is built they will open their business around the road. This is because road is neither rival nor excludable. Now let’s assume Ayansa will build the first 3 Km. This will not be enough for Bilisuma, who is looking for 7 Km. Bilisuma has to invest more, but the question is how much. One option is to invest in the additional 4 Km (7 Km minus 3 Km), so he can have the needed 7 Km. Another option is to invest on new 7 Km. To maximize profit, a rational action is the first option. Ayansa will build 3 Km and Bilisuma will build 4 Km, and the economy will has 7 Km road than the 10 Km optimal road. This means Bilisuma will use road built by Ayansa, as free rider, and he is only adding the road needed from Ayansa’s road to his business.This is why market allocation of public goods and services is not Pareto-optimal or the best possible resource allocation.

The above market failures are traditional in sense that they have been known for decades. Moreover, there is nothing special about these market failures to rural area. These are market failures which have been widely discussed in economics. However, “these market failures were highly circumscribed” (Stieglitz, 2001 pp. 11) and did not represent all important market failures, that can be faced in development process.

### Non-traditional market failures

1. **High transaction, over head-and administrative-cost**: rural areas are known for their sparsely populated areas. Given the low population density, the transaction and administrative cost of supplying goods and services will be very high. Facing such high administrative and over head cost, the state will often under supply public goods and services to rural areas. A 10 km road can serve 10,000 people in urban areas, but to serve 10,000 people in rural areas, the state has to build much longer roads, say 50,000 km. Similarly, high administrative cost that can be expected with low population density will result in under supply of state administrative services; like police, judiciary, local administration, and so on. This is, partially, why rural areas are having less public goods and services compared to urban areas, all over the world. As a result, most of the private market is observed to be missing or mal-functioning. The missing markets include banking, insurance, information, recreation, and so on. This means, the private sector does not have economic incentives to supply Pareto-optimal goods and services to rural areas.
2. **Imperfect information or asymmetric information**: Imperfect information is observed, when people does not have perfect information about course of events. Asymmetric information is observed when all concerned bodies are not having balanced share of information.

Under the imperfect information paradigm, markets are almost never Pareto-efficient (Stieglitz, 2001, pp 15). This means there are many ways to improve market allocation. Unless we assume that there is complete and efficient credit, information, insurance and future markets for farmers in rural areas; market allocation will not result on the best possible resource allocation, under risk (Stiglitz, 1981).

1. **Manipulative middle man**: perfect competition assumes the existence of large number of buyers and sellers, in which everyone is a price taker. However, in rural areas large and unorganized rural agents are trading with small number of middle man. First, rural agents will have neither the production capacity, nor the resource to invest in information. On other side, traders can afford to invest in information and this will create asymmetric information, to disadvantage of rural residents. Again farmers lacking adequate storage and financial resource will be under stress to exchange their output at whatever price. This will create asymmetric bargaining power in hand of manipulate middle man. Moreover, farmers will come to market with their grain, which needs more transaction (mainly transportation) cost, and middle man with their money, which needs less transaction cost. Under such reality, rural agents are under more stress to sell at whatever price compared to traders. These facts will concentrate marketing power in hand of manipulative middle man, to result on Pareto-suboptimal resource allocation. In such reality, farmers will lack the incentive to be innovative, to be productive and to take risks. That is why, any change which can improve this structure directly or indirectly can improve market allocation.
2. **Factor immobility under imperfect information:**  investment decisions, if done under perfect information and factors of production are mobile, market allocation could be Pareto-optimal for private goods and services. Mobility implies inputs are like Jelly, which can take any form in process of production. If capital is invested in photocopy machine and the photocopy business is not profitable, the photocopy machine can be changed into coffee machine to open cafe. If not, any intervention which can improve resource allocation under imperfect information means which can help you to start cafe than secretary service at the start, will improve market allocation. Since most activities in developing rural areas are less capital intensive, this shortcoming is not a series challenge into market allocation in rural areas.

Market will coordinate the action of egocentric economic agents toward maximization of social welfare using the invisible hand of competition with incentive provided by prices. Viewed from different angle, market allocation under its assumptions will result on best possible resource allocation, because it uses efficient institutions which guide individual toward maximization of social welfare. The three fundamental institutions among the diverse matrix of market institutions are:

1. **Private property will have protection under the law**: this means you can’t take somebody’s property and output without his /her consent.
2. **Exchange has to be by consent of all parties involved:** this is extension of the above market institution. If private property is respected, private property can be exchanged only by full consent of everybody involved.
3. **Freely agreed contract has to be enforced by state or other third party:** once people freely sign contract, the contract has to be enforced. If not, it will increase uncertainty for agents and this will increase production risk, to limit their efficiency.

## State as institution for development

**Stateis also an institution with set of rules for governance**. At the same time, state is an organization built out of three sub-organizations classified as:**administrative/executive, legislative and judicial bodies.**To achieve its social objectives, state will need to coordinate actions of its people and its own parts towards a pre-determined objective. This is done by fixing different formal institutions or laws. How much tax people have to pay, what service people can expect from government, how people elect their political leaders, how people monitor the elected officials and so on, will determine the efficiency of the state.

Due to market failures and missing markets, market allocation will not result in the best possible resource allocation. In other words, **market forces alone will not result in best possible rural development**. That is why we need **alternative institutions to give complementary signal to coordinate diverse activity of many agents, with diverse and personal objective, toward achievement of fast and sustainable development.**

Market institutions are based on free exchange of property. But state institutions are based on coercive power and mandatory transfer of property. Under some conditions, market failures and missing markets, such institutions can do better than freewill based market institutions.The role of state in rural development as complementary institution to market and its rationales are given below:

1. **To provide public goods and services**
2. **To internalize externality:** if market demand is the same as social marginal benefit and if market supply is the same as social marginal cost, market forces will result in the best possible resource allocation. However, when there is negative externality, social marginal cost will be higher than private marginal cost, as result market institutions will over supply the good or the service. That is why mandatory tax has to be levied to make the private marginal cost equal to social marginal cost.

Viewed from different direction, education, health care, sanitation and other social goods do exert positive externality on society’s welfare. In other words, the marginal social benefit is higher than private marginal benefit. As result, market forces will supply less than optimal social goods. That is why state has to subsidize the supply of education, health care, sanitation and other social goods in order to enable people to be more educated, healthy and clean.

1. **To deal with imperfect information and risk:** given rural areas are highly dependent on farming and farming is dependent on random natural events, there will be high level of risk in rural areas. As stated above, given information, insurance, financial intermediation and future markets are either missing or highly imperfect, market forces will result in Pareto-suboptimal resource allocation. That is why state intervention in the form of price stabilization, safety net, drought relief and other forms can have productive impact on rural development. Moreover, given public nature of information, state investment in collection and dissemination of information is very critical for efficient allocation of resources by market forces. State can work either in reduction of risk faced by economic agents or creation of risk management capability within economic agents or both. A classic example for the first one is oil price stabilization through buffer fund implemented in Ethiopia. Drought relief, safety net and income diversification efforts are good example for the second one. Moreover, state intervention to improve the functionality of financial intermediaries and risk management institutions (like insurance companies) is example of risk management capacity building.
2. **To create egalitarian society:** even if markets are efficient, in which you can’t make some one better off without making some body worse off, the final distribution of benefits may not be egalitarian. If the initial distribution of capabilities (education, wealth, asset, social network and so on) is unfair, the final distribution of economic benefits will not be fair.

If market is working under perfect conditions, it is distribution neutral. As result, it does not matter if land, labor, capital and other resources are owned by X or Y. If you have land, the value of the land for you is the market price. When you use the land for production purpose, the opportunity cost that you are facing is equal to price of the land. And if you buy it from others, the cost of the land is equal to its price. So the cost of production will not be affected by distribution of resources if markets are perfect. Under such reality assuming X is capably poor and Y is not; capability can be distributed from Y to X. This can be done by taxing Y and investing on X’s capability or actual redistribution of assets. In other direction, you can tax the rich in order to subsidize the poor. This means, even if markets are working perfectly, there is role for government to distribute capability and consumption.

If markets are imperfect, skewed distribution of wealth and living standard could result from market power of the better off than from its contribution to social good. In such case redistribution of wealth is advocated, even by those who accept market allocation of wealth and living standard as legitimate and moral. If markets are imperfect, they will not be distribution neutral. If there is efficient but land constrained farmer, in otherwise perfect market, he/she can buy or rent land at existing market price. So whether he/she own land or not will not make any difference in cost of production. Under imperfect market, however, he/she may not have access to land at existing market price. Under such realty, redistribution of land to favor him/her can improve efficiency and redistribution which disfavors him/her can reduce efficiency. So redistribution under imperfect market can lead to more or less efficiency depending on local condition.

1. **The need to create rural urban balance:** missing markets, missing public goods (services) and missing administrative services are common reality of rural areas within developing economies. These facts coupled with low organizational capital of rural population, can make development highly urban biased phenomena. To solve this challenge, state intervention to organize rural population into functional political body and to improve the provision of goods and services is critically needed in rural areas.
2. **Need for leap forging or to compress the gestation period of development:** the important point about market is that it will tend to solve its own failures in the very long run. Not only market forces will self-perfect in the long run, but also complementary local institutions will spontaneously emerge to solve the problem of market failures. This means, market forces if they are left for themselves, in very long run can solve their own problems and can lead to economic development. Unfortunately, the implication is that we have to wait 200 to 300 years in order to achieve the level of development attained by developed economies.

With appropriate and selective use of the visible hand of the state, **government can possiblyshorten the gestation period of development into maximum of 50 years** (as was the case in Japan) or **to minimum of 20 to 30 years** (as was the case in East Asia countries). In developing countries like Ethiopia, where majority of the population is living in rural areas, any leap forging effort ignoring rural is a faulty business. The need for leap forging will call for optimal government intervention in rural areas, where series market failures and missing markets are widely observed.

**State failure**

No rational mind can deny the complementary role of that state in rural development. This is because in mixed economy, in which the invisible coordinating hand of market is supplemented by the visible coordinating hand of the state, wide spread state failures are norm than an exception. These state failures include:

1. **Information asymmetry and managerial diseconomies from the state side:** if state is going to produce goods and services by itself, as was/is the case in communist countries, it will face series managerial diseconomies and asymmetric information problem related to demand dynamics. In market economy, demand dynamics is communicated to producers through dynamics in market prices. When market and its prices are eliminated, the state will normally face asymmetric information related to demand dynamics. As result, state will fail to organize production to meet every changing customer demand.

State engaged in production of diverse goods and services will face managerial diseconomies, too. Given the fact that civil servants are known for their inefficiency, it is impossible for central planning commission staffed with inefficient workers and bureaucratic procedure to do such impossible job. This is the main reason why communist system was a complete failure everywhere.But even within mixed economy, where the state is concentrating on solving externality and public goods (service) problems, state will face series information asymmetry related to economic agents actual income, wealth and use of public goods (services). If the state lacks adequate information on income, expenditure, wealth and demand for public goods (services), it can’t fix optimal tax to supply optimal public goods (services). The reason why state in developing economies is highly dependent on indirect than direct tax is because it has better information related to indirect tax base than direct tax base. Under such reality, state intervention which is planned to avoid free riders in the allocation of public goods (services) will fail to tax all individuals either according to their ability or their benefit. This means some public goods and services will not be supplied, because the state needs high administrative cost to enforce tax laws under asymmetric information.

Lack of information about the occurrence and extent of externality will destroy state capacity to internalize externality. Since the state does not have all necessary information needed in order to internalize externality, it will face more administrative cost. If the administrative cost is higher than the benefit of solving the externality problem, it would be rational for state to ignore the externality problem.

1. **Information asymmetry from public side**: in democratic system, where there is higher accountability of government to the people’s choice, asymmetric information faced by voting population will result in suboptimal state policy. If public choice, about government action, is reflected by peoples’ capacity to vote into office individuals who do their wish, they need to know the application of each and every policy and their possible outcomes. Unfortunately, due to need for state secrecy, there will be imperfect disclosure of state policy and actions. This will give higher freedom for politicians to divert from their electoral choice and stay in office. Even if, each and every, information is made public, voters will not have the capacity to understand the net impact of all state policies. When economists can’t even agree on the net impact of any policy, how can a layman do better? This is why state intervention is not granted to be productive.
2. **The failure of voting to consider intensity of want:**in democratic system every person is given equal voting right. If 10 people are expected to lose 100 birr each, due to proposed new policy, social welfare will decline by 1000 birr. But if 500 people are going to be benefitted 1 birr each, the expected social gain is 500 birr. Given the fact that 500 people are for the new policy and only 10 are against the policy, the new policy will be implemented with support by significant majority. This is despite the fact that total welfare will decrease by such action. This means voting, which does not consider intensity of want, can’t necessarily lead to maximum social welfare.
3. **Lack of incentive and high inefficiency in public sector**: the bureaucratic system, which is used in public offices, is less flexible to changing conditions and the incentive system used in public sector is loosely linked to efficiency. That is why development, which needs dynamic and flexible decision making, will face rigid bottlenecks from the public sector.

First, decisions will take longer time and such bureaucratic rigidity will negatively affect efficiency of the public sector. Second, the public sector facing highly asymmetric information will have less capability of works, which normally work less than their full capacity.

There is a tendency for **state to pay lower salary**, everywhere in the world, which will create **adverse selection problem**. This implies only option less workers, who can’t find alternative employment, will be employed at low paying public sector. Most often, these people are the less productive part of the labor force. To make things worse, since reward in public sector is not directly related to productivity, there will be series **moral hazard problem** among the civil servants. This means, there is **no adequate incentive for civil servants** to be as efficient as private sector employees. Even if there are exceptional workers within the public sector, social capital among civil servants will be used to ostracize/exclude the efficient ones. Observing that civil servants are inefficient, the state has rational base to pay low salary, keeping the vicious circle ongoing!

In general, state can solve some market failures, but **it is not a magic institution** that can solve every market failure problem, everywhere. This means, state is a critical institution for rural development, but it is not also a magic fairy or a silver bullet which can be used to achieve rural development, in all cases. The logical question left is “do we have another option”? The answer of institutional economists is; yes ended!

## Evolution of alternative institutions

If market is perfect on coordinating diverse and self promoting act of rational agents on production, consumption, and distribution of private goods and services, and the state is perfect on internalizing externalities and on supplying public goods and services; all that is needed for efficient attainment of development is just perfect mix of market and state institutions. Unfortunately, imperfect market and state, which we have in real world, will face high cost of doing things, which will hinder their efficiency. That is why **complementary institutions**are needed to give **complementary signal in order to improve the efficiency of the invisible hand of the market and the visible hand of the state**. These alternative institutions include:

1. **Share cropping**: If market is perfect and transaction cost is zero, a landowner, who faces a production technology and perfectly elastic supply of labor, fixed somewhere and he/she will employ an optimizing level of labor. But, the assumption of zero transaction cost implies that there is no screening, monitoring and supervision cost of labor. In other words, the employer has perfect information about the capacity and actual efficiency of each worker. Moreover, it implies the employer has function (at best perfect) financial intermediaries, which can supply him/her capital at market clearing interest rate. This capital will be used to hire labor and purchase other inputs.

The problem is that in real than assumed world, high transaction cost is a norm than an exception. First, the landlord will not have adequate information about the production capability of each worker and use of his/her capability. This will result on asymmetric information problem. The existence of asymmetric information in turn will create adverse selection problem. If more efficient and less efficient workers are competing for the same job and the employer does not know who is who, he/she will end up with less efficient worker, who is willing to accept a low wage rate. Again given farming is land extensive, land labor ratio will be very high. This will create asymmetric information related to actual labor efficiency. The workers know better how efficiently they are working compared to the employer, which can’t easily monitor them. Or there will be moral hazard problem. These facts, adverse selection and moral hazard, are why if landlord has to hire labor, there is need for costly supervision. The supervision cost is part of a transaction cost incurred in exchange of labor power for wage rate. Additional transaction cost is related to the interest rate that has to be paid for informal money lender, in facing dysfunctional or missing credit market.

Agricultural production, in form of plant share cropping and animal husbandry, will become option less way of life, in order to provide food items and means of survival for ever increasing population. This in turn will need investment in technology and capital to make farming possible. Hunter and gatherers need to develop all necessary knowhow of farming methods and need to invest in farm tools. Unfortunately, the older institutions, which make all resources and products a common property, will not encourage such optimal reaction to change in factor endowment. This means the existing institutions, which use to provide optimal rules for earlier factor endowment, will become fetter of development with changing conditions. So in order to create conducive conditions and incentives needed for technological progress and capital accumulation, new institutions will be developed.

1. **Service cooperatives**

If the transportation, storage and information costs are a determinant factor for efficiency of a marketing system, small scale farmers, which are falling to benefit from storage, transportation and information economies, will be effected the most. Moreover, given financial stress related to obligations to pay debit and tax or to cover expenditure needs, small scale farmers will be forced to sale their output at whatever terms. Additional stress will be also created from lack of proper storage facility. As result, having low transaction cost and better information, manipulative middle man can develop unfair trading relationship with small scale farmers. The negative effect of these market failures on farmers’ incentive to be productive, efficient and innovative is inversely related to their size. This means the intensity of the problem is directly related with smallness of the farmer production system. **The natural solution for market failure related to smallness is cooperation.**

One possible way that can be used to improve the bargaining capacity of small scale farmers is to **organize them into service cooperatives**. Collective action under service cooperatives is a natural reaction for problem related to smallness. This will enable them to have more market power that can balance the power of manipulative middlemen of scale on transportation, storage, information collection and so on. This will reduce the transaction cost they face in exchange.

1. **Value chain and contract farming**

In buyer driven market economy an exporter, a wholesaler and a manufacturer needs a sufficient and reliable supply of agricultural products from large army of small scale farmers. The problem is farmers are constrained by lack of credit, lack of appropriate technology, lack of extension service, lack of irrigation facility and high level of market uncertainty. These are related to financial, information, technology, capital and output market failures. Under such reality, small scale farmers may not able to supply reliable quantity of agricultural products to other economic agents. As result, both farmers and other economic agents may not able to achieve what is best for both of them and the society. The problem is related to existence of anonymous exchange between buyer and seller. If buyer and seller are anonymous and operating under imperfect market, economic agents will not have adequate incentive to avoid moral hazard and adverse selection problems.

By **changing the institutional setup from anonymous exchange into contract farming**, much better outcome can be generated under imperfect market setting. In **contract farming** a buyer, could it be a manufacturer, wholesaler or exporter, will supply credit, new input (technology), extension, irrigation facility and other inputs to the small scale farmers. For doing that he/she will has exclusive right to purchase their output, at predetermined price. In such arrangement farmers will not only have cheap access to agricultural inputs, but also assured market for their output. The buyer will also have assured access to reliable quantity and quality of agricultural products.

In contract farming market failures are managed by interlinking input and output markets. Any input cost or unpaid credit can be easily recovered from income of the farmer. Adverse selection and moral hazard problems will be avoided, first by using the information in cash flow of the farmer and second by beneficial transaction cost advantage of contract farming.

1. **Micro finance institutions (MFI)**

People facing asymmetric information, that can generate adverse selection and moral hazard problems, will reject to lend to someone, who is willing to pay them acceptable level of interest rate. This is because they are not sure about the actual riskiness of the exchange. Actually, asymmetric information has a tendency to increase the risk faced by the lender. As the same time the search cost for potential borrower or lender, the cost of signing a contract and enforcement cost of a contract will be very high. Enforcement cost is very high, because the legal system is less efficient, less predictable and more sluggish in developing economies. Given these facts, direct financial market, in face of high transaction cost, will exist in the form of informal money lenders, only.

The informal money lender will use his multifaceted relationship based social capital and local knowledge to reduce transaction cost, moral hazard and adverse selection problems. First, be living and working in the area, the money lender will have better local knowledge compared to bankers. This knowledge will be used to screen borrowers at low cost. Second, moral hazard can be easily managed, given the money lender is important trader, civil servant or landlord in the area. This implies borrowers are dependent on him/her both only for loan, but also for land, merchandise and other services.

However, rural areas will create their own special problems to result on missing financial intermediaries. First, rural areas are dependent on risky agriculture. This is because of high dependence of agriculture on erratic nature and high quantity elasticity of demand faced by agricultural products. Second, rural population will have less marketable asset to serve as collateral. This will increase both moral hazard and adverse selection problems. Third, banks will face high level of diseconomies of scale on transaction cost. In simple words the bank will face huge transaction cost, if it wants to serve the rural population. Given this cost will be higher than the interest rate it can possibly charge, the bank will normally ignore the rural population, resulting in missing financial intermediaries.

Unfortunately, achievement of rural development, in face of vicious cycle of poverty which is very common in rural areas, is unthinkable without access to finance. For farmers to adopt technology, to invest on their own human capital, to specialize and commercialize, they need cheap access to finance. But the formal financial market, which does not exist in rural areas, is not in position to supply the necessary finance to rural population.To deal with the challenge; an innovated institution proposed is in the form of micro finance institution (MFI). This institution is created by taking the strong sides of both the formal bank and the informal money lender. The strength of formal bank is related to its capacity to rise saving. The strong side of money lender is related to its capacity to reduce transaction cost by depending on social capital and local knowledge of the community.

MFI lend not to individuals but to a group of individuals. The idea is to use social capital, local knowledge and peer-pressure for productive purpose. People living in the same community will have better understanding of each others’ behavior than outsider. Since under group lending default by any member is recovered from income and asset of other group members, they will use their local knowledge to screen potential group members. People will form group with trustworthy community members only. This will reduce adverse problem and moral hazard problem, too, will be reduced due to two factors. In one side, community members have better capacity to monitor each other than an outsider banker. In other side, give multifaceted nature of their relationship, economic agents under imperfect market will care more for social than legal sanction. So fear of social sanction and peer pressure will farther reduce the level of moral hazard. By depending on social incentive and local knowledge of a community, MFI can reduce the transaction cost of lending to make the rural poor bankable.

MFI can also give additional banking service to rural poor by using locally available cheap, but somehow educated labor force with minimum office facilities. It could be costly to open 10 modern bank branches in rural areas, but is not costly to open 10 rural MFI offices staffed with cheap local labor. This will enable the MFI to rise saving and implement its frequent repayment requirement without having high transaction cost. Some MFI also demand mandatory saving from its customers to rise saving and introduce culture of saving.

However, MFI is not a silver bullet that can solve financial problem of every poor rural population, everywhere. First, the poorest of the poor have less probability to be selected as group member. This means the benefit of MFI will occur to the average poor and better off poor, but not be effective. Third, if risks are unavoidable and systematic in nature, group lending will not reduce the risk of lending. Systematic risk is a risk which affects all economic agents at the same time. These include drought, war, and political instability and so on.

1. **Warehouse receipt system**

Due to lack of proper storage facility, small scale farmers will loss significant portion of their output due to spoilage, rodents and insects. To avoid this problem, the only option available for small scale farmers is to sell their output just after harvest. The stress sell is made very urgent by the need to pay for tax, debit and other monetary expenditures, under dysfunctional or missing financial markets. When large numbers of small scale farmers sell their grain just after harvest, market price will collapse. Even when prices are getting lower, the only option for small scale farmers is to supply more in order to satisfy their financial constrain. This will create vicious cycle of poverty.

To solve this warehouse problem, a warehouse provider can charge very low fee to provide storage facility to small scale farmers. Given the existence of dimensional economies of scale in storage, large storage facility is much cost effective than small scale storage facility.

After storing grain in certified warehouse, farmers will be given a warehouse receipt. The receipt is certificate of deposit and it will show the type of grain stored and its quantity and quality. This receipt can be used as collateral in accessing bank loans at discount base. Grain depositors can borrow some percentage of their grain value from banks. This is known as discounting. This will also solve the credit constrain of small scale farmers. If the market is well developed, the warehouse receipt can be also used in market. Not only people can borrow by using their deposit of grain as collateral, but can also trade on the deposited grain. So warehouse receipt system is an integrated solution for storage and liquidity problem of small scale farmers. But again is not a silver bullet, which can solve all credit and storage problems of small scale farmers.

1. **Commodity exchange**

Commodity exchange is an integrated solution under imperfect market, with objective of building macro trust. In other words, commodity exchange will do what networks or socioeconomic groups are supposed to do and at the same time will solve the problem created by them. Moreover, storage problem, grade and standard related challenges and other problems not fully addressed, either by networks or socioeconomic groups will be also effectively. Addressed by commodity exchange that is why it is an integrated solution for market failures, widely observed in developing economies.Commodity exchange will develop appropriate grade and standards. Since grade and standards are public good in character, it is cost effective to supply them by central body, like commodity exchange.

1. **Social capital**

As was seen above, otherwise perfect market, if we avoid the perfect information assumption there will be moral hazard problem. This is reflected in breach of agreed terms of contract; labor inefficiency, unless intensively supervised; lack of incentive to minimize risk by insured agent and so on. Ideally these problems could be dealt, by the judicial system. Unfortunately, given low efficiency of developing economies judicial system, the cost will normally overweight the expected benefit such process.

Viewed from socio-cultural dimension of life, however, ideologies like religious codes, norms and values can easily suppresses moral hazard problems. The incidence of moral hazard problem should be lower among people; whose personal interaction is so intense, in which one can easily predict the action of the other even without having complete information. This will result in mutual trust among community members.

Mutual trust, nurtured through close personal interaction, should work as effective break on committing moral hazard. Community is a group of people tied by mutual trust, based on intense personal interactions and fear of losing multifaceted relationship.

1. **Civic societies and NGOs**

A good alternative to state is Civic Society, in general, and Non Governmental Organizations (NGO), in particular. Civic societies are established by value oriented individuals with high value for civic duty. A group of doctors may organize themselves to eradicate malaria. A community in one location may organize themselves to clean the street. These are examples of Civic societies. This means, if a group of people organize themselves, under civic society, to improve the life of street children, they tend to have more efficiency than civil servants.

Moreover, their value orientation will reduce the importance of hierarchy in decision making. Since a leader can’t benefit anything by blaming the failure on others, he will collaborate with others like close community for achievement of their common value. A salary oriented medical doctor can blame the failure on others and still have his salary. So if the nurse was absent, if the medical instruments are not there or if there is shortage of finance, he rationally will seat ideal. But a value oriented doctor or a doctor with sole objective of saving lives will do everything, on his power, to solve whatever problem that may come in his way.

Additionally, salary oriented boss may reject good ideas coming from the bottom, simply to preserve his prestige. However, value oriented boss will be extremely flexible to all ideas coming from all people with similar value orientation. This will not only improve efficiency, but also will create community kind relationship, where everyone is cooperating and supervising each other for common goal. By avoiding hierarchy, civic society can supply the needed high level of flexibility in solving market failure problems. In general, a civic society established by value oriented individuals has structural advantage at micro development.

NGOs or Non Governmental organizations could be established by value oriented individuals, but are not necessarily filled by value oriented workers. However, their capacity to pay higher salary, compared to public sector, will reduce the occurrence of moral hazard and adverse selection problem. Since they can pay more than average salary, they have capacity to attract efficient workers. The higher salary that they pay will reduce moral hazard problem from two directions, too. First, the felling of being fairly treated will create incentive to be hard worker. Second, the increase in life time income, once people join NGO, will increase the opportunity cost of losing current job. This will reduce moral hazard problem. If you are paid market average or below market average, you will not loss much by losing your current job.But if you are paid more than average, the life time opportunity cost of being fired will be very high.

Under such reality, even if the probability being discovered is low, still workers will try to avoid development of moral hazard. The negative effect of salary on moral hazard will be stronger, if there is high level of unemployment, which is the case in developing economies. In general, NGOs can reduce moral hazard and adverse selection problems by paying efficiency wage than market wage rate.

Small NGOs specializing in micro development can also have more flexibility than state bureaucracy. Small NGOs does not need to build a complicated hierarchy and this will make them very flexible and efficient for micro development. This is why many international organizations, like World Bank (WB), insist for leading role of NGOs and Civic society on rural development.

One thing you will learn in institutional economics is that any institution is not a perfect solution to all problems everywhere, in line with the popular tale: “nothing is perfect under the sun”. Practically, it is safe to assume anything extreme is always wrong. This is because of the following problems that can be created by expansion of NGOs and Civic Societies:

1. The first problem is that all civic societies, in general, or all NGOs, in particular, are not established by value oriented individuals, in all cases. If all NGOs or civic societies are assumed to be efficient by default, salary or corruption oriented individuals will have incentive to establish either NGO or Civic societies a perfect solution for all rural development problems, the other extreme do assume all NGOs and Civic societies are useless corruption machines. The practical truth lies in the middle, in which some NGOs and Civic Societies are extremely productive, but majority of them are nothing but a corruption machine.
2. Social capital like any capital can be used either for productive or destructive purpose. NGO or civic society workers can use their social capital for productive or mutual shirking and back scratching. Unfortunately, the second use of social capital is observed to be the most dominate use of social capital in NGOs and Civic societies.
3. Rural development needs an integrated strategy at both sectoral and spatial level. However, civic society and NGOs are efficient under micro development only. If Civic Societies and NGOs increase in size, they will develop bureaucratic system of management losing their advantage in terms of flexibility. In a way they will lose their advantage at micro development. As result rural development can’t be managed by either civic societies, in general, or NGOs, in particular, only. State is needed to integrate the effort of civic society, NGOs and other institutions of rural development.
4. The popular say: “one who controls the pocket controls the mind” did work here too. If government is not working in line with people with, people can vote them out of office. If a trader fails to supply goods and services demanded by customer, they can vote him out of market through their market demand. If NGOs or Civic Societies work against the peoples wish, what can the society or state do then? They are funded by international donors and the donors mostly having their own agenda. That is why when the international agenda or agenda of the donors’ is changing, everything in the process is abandoned and civic societies and NGOs will start the new song of the donors. If you want to know what NGOs and Civic Society are doing everywhere in the world, just read the manifesto of the donors! Unless we assume the best donor is the smartest of all human being and he/she has interest of developing economic welfare on mind, it is never, at best, or stupid, at worst, to assume NGO’s or civic society everywhere are promoting social welfare of recipient community.
5. Even though efficiency wage is acceptable under asymmetric information, there is need for cost benefit analysis, as anything in economics. Wages which are fixed very high, by taking international wages into account, through can attract international and domestic best expertise, NGOs will not have enough finance left for their development effort then after. In other words NGOs have tendency to spend significant portion of the budget on wages and salary of workers.

In general, NGOs and Civic societies are very important institutions, but are not a fairy which can solve every state failure problem everywhere. They have to be evaluated case by case not by name. Moreover, the integrating role of the state in rural development process can’t be ignored, though state is not also a magic formula in development process can’t be ignored, though state is not also a magic formula in development process, either. As aforementioned before, the problem with economists, in particular, and social scientists, in general, is that in order to prove the imperfect thing as perfect, they will open door for series criticism which can easily show imperfection on it. Under such reality the good will become enemy of the perfect. Researchers will search for other perfect thing ignoring what is good within the imperfect theory or institution they have.

# THEORIES, MODELS & APPROACHES TO RURAL DEVELOPMENT

## Lewis’s model of development with unlimited supply of labor

W. Arthur Lewis’ model is based on the fact that in many developing countries, there exist large reservoirs of labour whose marginal productivity is negligible, zero, or even negative. This labour is available in unlimited quantities, at a wage equal to the subsistence level of living, plus a marginal sufficient to overcome the friction of moving from the subsistence sector to the capitalist sector, which may be called subsistence-plus wage. As the supply of labour is unlimited, new industries can be set up and the existing ones can be expanded without limit, at the ruling wage rate. The capitalist sector also needs skilled workers. But Lewis’ maintains that skilled labour is only a temporary bottleneck and can be removed by providing training facilities to unskilled workers.

Since the marginal productivity of labour in the capitalist sector is higher than the ruling wage rate, there results a capitalist surplus. This surplus is used for capital formation, which makes possible employment of more people from the subsistence sector. The increase in investment by the capitalists raises the marginal productivity of labour, which induces capitalist employers to increase their labour force till the marginal productivity of labour falls to a level equivalent to the ruling wage rate. This process goes on till the capital-labour ratio rises to the point where the supply of labour becomes inelastic. Some critics have pointed out that Lewis’ optimism concerning development by absorption of disguised unemployment from agriculture is unfounded, because it is not possible to transfer a large number of workers permanently and on a full-time basis from agriculture to industry, without a drop in agriculture output, that is, the marginal productivity of labour in Agriculture is not zero.

The Lewis theory can be explained with the help of Figure given below; where OS represents average subsistence wage in the subsistence sector, and OW the capitalist wage. At OW wage in the capitalist sector, the supply of labour is unlimited, as shown by the horizontal supply curve of labour WW. In the beginning, when ON1labouris employed in the capitalist sector, its marginal productivity curve is P1L1 and the total output of this sector is OP1Q1N1. Out of this, workers are paid wages equal to the area OWQ1N1. The remaining area WP1Q1 shows surplus output. This is the capitalist surplus or total profit earned by the capitalist sector. When this surplus is reinvested, the curve of marginal productivity shifts upward to P2L2. The capitalist surplus and employment are now larger than before being WP2Q2 and ON2 respectively. Further reinvestment raise the marginal productivity curve and the level of employment to P3L3 and ON3 and so on, till the entire surplus labour is absorbed in the capitalist sector. After this, the supply curve WW will slope from left to right upward like an ordinary supply curve, and wages and employment will continue to raise development.

 Wage/ P3

Marginal Product P2

 P1

 Q1 Q2 Q3

 W W

 S S

 L1  L2  L3

 O N1 N2 N3

 Quantity of Labour

***Figure- Lewis unlimited labour Model***

Lewis model seems to provide a good framework to understand the process of economic development in labour-surplus developing countries. Its basic premise is that labour productivity in agriculture must increase substantially in order to generate surplus in the form of food to be used for development of the non-farm sector, and to release the surplus labour from agriculture for meeting the growing needs of the non-farm sector. However, the relevance of the model is constrained by a number of factors.

1. Labour unions may push the wage rate up as labour productivity increases, and keep the rate of profit and rate of capital formation lower than expected.
2. The capitalist employers may use the surplus for speculative or non-productive purposes. This is, in fact, what has been happening these days in developing countries.
3. To meet their rising expectations, rural people may consume more and save less than predicted by the model, and thereby dampen the pace of development.

## Human capacity development theory

The early implicit recognition of intangible resource is to be found in Solow’s analysis of labour and capital contribution to economic growth of USA. He found that a significant variation in output (87%) in the period of 1900 to 1949 cannot be explained by the traditional factors of production. This residual is thought to be measure of our ignorance or the contribution of technological progress as embodied in capital and labour.

And later Schultz by incorporating the investment in human development but using the same production function able to explain a significant share of the Solow’s residual. And he forcefully argued for the importance of human capital in development process in saying that “suppose there was an economy of the land, physical reproducible capital including available techniques of production that we posses in the USA, but it attempted to function under the following restrictions: there would be no person available who had on-the-job experience, no one who had any schooling, no one who had information about the economy except of his locality, and the average span of life of the people will be only forty years, surely production will fell catastrophically. It is certain there will be lower output and extraordinary rigidity of economic organization until the capability of the people was raised by investing on them”. These clearly show that human capital is a precondition for efficient utilization of any means of production and general flexibility of the economic system. In general, any economic development effort which does not have human development as a critical input is a destined to feller.

Human capacity theory of development emphasizes the importance of human capital for achieving both economic and social developments so the focus is on the totality of human potential and the need to harness it for the good of the people. In this view point human capital implies the mental and physical quality of people and this can be improved by education, training, health care or other spiritual methods.

And given most of the employment positions that were once held by former colonial rulers were left open on the newly developing economies there was huge investment on education by developing economies governments. And some of them insist that development as simple as human development process. That is, the more human development you have the more effectively your economy can run, so for them development process was as simple process of human capital accumulation. And until recently no body dears to question such kind of think.

The unnecessary emphasis on education without appropriate employment creation is found to lead the mass of educated but unemployed people without any real contribution to the economy but it is fertile ground for any political disturbance and revolution. And the problem is going to get worst due to wrong kind of employment and promotion structure and politically motivated supply. Employment are related to educational achievement, the more educated get the job first it does not matter if his/her education can add to the productivity. And promotion is done in the same manner. So when people get unemployed the only way they can find job on the formal sector is if they get more education. So shortage of demand will result in increase of supply of educated workers. Moreover, given the high government subsidy, individuals will purist higher education until it is overcrowded and again they have to search for higher level.

The point is given the employment and promotion structure which is not related to productivity but educational achievement, the shortage of demand will create in increase, than decrease, of supply intensifying the problem further. And this is made easy by high subsidy given by government. Moreover, a youth which will work in manual employments will reject to work such kind of work once he/she got educated so the marginal contribution of education to productivity could be zero if negative. Moreover, the analysis that development is as simple as human development is falsified by the fact that despite many developing economies investment on education for many years they remained poor. So once the minimum level of educational capacity is built which is critical to fill the gap left by the former colonial powers it would be wise if education supply was made to go in line with educational demand or observing capacity of the economy.

But the problem with such analysis is that education demand and supply does not work in perfectly competitive environment with perfect adjustment. You can’t produce 1000 engineers when demand increase over time (say month due to foreign direct investment). And normally investment decision which creates demand for educated labour force will depend on availability of educated human power, hard and soft infrastructure, and conducivemacroeconomic environment among other things. So given the fact that in imperfect market of human development demand is influenced by supply, the existence of educated labour force supply over current demand is very important. But still cost and benefit analysis among those overheads which include education, health expenditure, hard and soft infrastructure will be unavoidable, given the shortage of resources. And it is important to be given due attention to quality of education than quantity of education.

In case of rural development, the contribution of human development (especially related to education) are the following:

1. It will directly improve the productivity of agriculture
2. It will improve the probability of getting off-farm employment
3. It will lead to improved family planning
4. It can improve the health and nutrition of the people and its impact is felt over generation
5. By widening the horizons of knowledge, it can enable them to overcome ignorance and superstitions
6. It can improve the risk taking and managerial capacity of the farmer

##  The modernization theory

Theorists of 1950 and early 1960’s viewed the process of development as a series of successive stage of economic growth though stages of economic growth through which countries must pass. It was an economic theory of development in which the right quantity and mixture of saving, investment and foreign aid were all that was needed to enable 3rd world nations to proceed along an economic growth path that historically has been followed by the more developed countries. In this case development was made synonymous with economic growth. This kind of thinking was resulted misunderstanding the economic structure of the newly emerging countries of Asia, Africa and South America. Moreover, the Marshall plan was very successful in enabling the war torn countries of the World War II to recover quickly.And Marshall Plan was an aid and credit provided to post World War II of Europe. Technological progress and saving investment played major role in transforming the current developed countries which were backward agrarian economies once up on a time. So it was thought developing countries has to pass from traditional to take off and to maturity by increasing their saving and investment and using modern technology, over time. This can be understood from Rostow’s five stages of economic growth. These stages are based on economic history of 11 currently developed economies and it is assumed every country has to pass through these stages:

1. **The traditional society -** The economy dependence on extensive farming and some minor irrigation facilities.But given absolute technology, output and productivity are labour intensive. Trade was localized and family and class ties play a major role. The landlords control the politics with the help of civil servants and the military. Every location was self-sufficient as trade is localized.
2. **The precondition for takeoff –** in this time there would be major change in socio-economic structure and production techniques. There would be increase in trade and a tendency toward industrialization. Through increase in agricultural production and investment on over head capital, there will be increase in saving and investment. And this in turn will create a fertile ground for takeoff.
3. **The take off-** the precondition will create a responsive environment for any technical, trade related or political stimuli to growth. And with any such change growth will be the normal life of the people. Take off needs more than 10% growth in rate of investment, development of at least one industrial sector with huge growth and existence of pro-growth, political, social and institutional set up.
4. **Drive to maturity-** this is the period where the society has applied range of modern technology to its bulk resources. In this period they have a technical and entrepreneurial capacity to produce everything they want, but the leading sector (s) which initiated the take off, will lose its (their) impulse. On social life the share of agricultural laborer in total population will go down and people will start to ask about the human cost of achieving take off and questions will be asked if the high capacity should be used for improving overall welfare or for making the nation strong.
5. **Period of high consumption**–growth will be taken for granted, so policies & peoples thinking will be highly inclined toward welfare improvement & making the nation super power.

If we observe the time before takeoff and post take off the main difference is related to high saving, investment and technology. And every country is supposed to pass through the same stages as the developed countries did. And this was further solidified by macro analysis of the H-D model.

 dY/Y = income growth or economic growth

 (dY/dC)/(Y/dC) = (dY/dC)/(Y/I) = (dY/dC)/(Y/S)

 Economic growth = saving rate/capital output-ratio

So the economy can grow faster if it can **save more of its income or introduce new technology** which can **reduce the capital-output ratio**. Therefore, for backward economies what is needed, according to this model, is **transfer of western technology and augments** as well as should substitute the domestic saving by foreign aid.

In general the model emphasis that development has to be achieved by transfer of western technology, capital and rationality. Moreover, it demands removal of all social, cultural and ideological obstacles to such process. So the traditional, political and social institutions have to be replaced by modern institutions and the form of government must be a democratic one.

This school predicts that development can be only achieved through industrialization and urbanization with technical transformation of agriculture. And it visualizes the American way of doing things and life as ultimate destination of life.

The main shortcomings of this theory are:

1. It assumes western technology which is developed in capital abundant economy is appropriate technology in developing countries with shortage of capital and surplus of labour.
2. American way of doing things is not the only way and American way of life is not the only destination of development. Manufacturing firms in Japan did follow traditional form of management and outperform the American counterpart. So development is possible to be achieved in different value system and way of doing things.
3. Although the stage of growth is based in 12 countries experience it was not found to be a robust historical ordering to be found everywhere. And it is very simplistic view of human economic history to put it in simple linear form without reversal and leap forging.
4. It simply considers local institutions as fitters of development despite the fact that they are indigenous remedies to both market and state failures. Actually some of them are out dated due to community failures, but all of them are not outdated.
5. Further, it does not recognize unsustainable nature of private sector derived growth over generations, without involvement of government to internalize unaccounted externalities.
6. Moreover, the existence of government failure to enforce the role of the game will result in skewed distribution of income.

But the school has three important contributions to rural developmental thinking. They are

1. there is need to introduce new technology to rise agricultural production
2. there is need to replace out dated and inefficient local institutions by better one, and
3. there is need to shift the view point of individuals toward scientific temper & norms

## The dependence theory

This school represents the idea of Marxist and nationalist elements. The growing dissatisfaction with modernization theory due to its failure to explain growing inequality, poverty, violence and military coups in newly independent nations of Africa and Asia lead some development scholars to ask new questions and find new answers using an alternative paradigm. This school views developing economies as a beset by institutional, economic and political rigidities in both domestic and international level, and are caught up independence and dominance relationship with the former colonial countries. Within this school three stream of thoughtcan be identified:

1. **The neo-colonial dependency model–**this attributed the existence and continuous of underdevelopment primarily to the historical evolution of rich country- poor country relationship of the international capitalist system. In such relationship the poor country is given the duty of supplying cheap primary commodities and to purchase expensive manufactured products. And even if the country is industrializing the MNC, technology &R&Dis controlled by the rich countries which lead to exploitation in form of profit repatriation. This relationship is sustained by elite groups within LDC’s which include land lords, entrepreneurs, military rulers, merchants, salaried trade union and government officials which benefit and are rewarded by such kind of exploitive relationship. These elites stop any reform effort which can improve the quality of life of the whole nation and by doing so they serve as agents of underdevelopment. In general underdevelopment is assumed to be externally induced situation.
2. **The false paradigm model –** this school states that underdevelopment is result of wrong policy prescriptions given by foreign scholars which does not know the local reality. And local analysts and policy makers are trained in western universities which make them simple proponents of such models despite very limited relevance. Moreover, the local elite group will benefit from such prescriptions and will push for their application using their political power. The problem is that the prescriptions how elegant on their analysis and presentation are based on wrong assumptions so are simple use less.
3. **The dualistic development thesis –** this school insists that underdevelopment is not a temporary situation that can be reversed in time, but it is a normal occurrence. As there is developed countries there will be underdeveloped countries, so development and underdevelopment are the two sides of the same count (reality). Given that fact the superior element will do nothing to help the inferior element let alone to trickle down to it. Actually it can work hard to develop the under development of the inferior.

Given thesefacts all dependence schools insist for new international order and socialist mode of production and ownership of means of production. And some of them insist that if the international relation cannot be altered, countries have to cut any trade ties with the capitalist world. But this school has the following shortcomings:

1. It failed to explain how development will be initiated and sustained once the international relation is modified.
2. Countries which follow state ownership means of production and nationalization of private property did end up with economic down turn and poverty. Moreover, countries like Albanian which applied the policy in its crude form did end up being the poorest nation in Western Europe.
3. Experience of the four tigers (Singapore, South Korea, Taiwan and Hong Kong) did show that there is an immense potential for developing counties to catch up with the rich countries with proper selection of domestic and trade policy.
4. Moreover, it neglects the importance of domestic factors in explaining under development like large population size, low human development, and depletion of natural resource and so on. Important implication of this school is that there is need for understanding the power relationship in rural areas in case where the assumption of large number of buyers and sellers assumption is violated.

## Integrated vs. non-integrated rural development

Integration in rural development can be discussed in various ways. It’s most common understanding concerns the integration of various economic sectors - agriculture, industry, services. Another frequently mentioned aspect is the integration of those disadvantaged social groups in the development process (women, elderly people, national and ethnic minorities, etc.), which could suffer even more if left out of improvements.

The models at this stage can be understood as a vertical slice of the whole rural development system (including the *central system* and one (any) particular *local system*), thus it tries to explain the process from the perspective of a single rural locality.

Components of the model are:

**Central Administrative System of Rural Development** – characterized by top-down, exogenous interventions, high level of institutionalization, bureaucratic control, written rules and procedures, the modernist technological regime and quantifiable targets;

**Central Development Resources** – financial resources in the central development budget, available for redistribution through the central system;

**Local Heuristic System of Rural Development** – characterized by bottom-up processes, heuristic aspiration of local people to improve their lives, flexible responses to challenges, social networks, diversity, multi-functionality, and synergistic effects;

**Local Development Resources** – rural values (natural, cultural, social), understood as resources, which often have to be unlocked or reconfigured if they are to be used for local economic development;

**Access-type Disadvantages** – limiting access (physical, economic, policy) and the free movement of goods, people and capital to and from backward areas;

**Resource-type Disadvantages** – (financial, human, institutional) limiting the ability of rural areas to produce goods and services saleable on the global market;

**Result** – the outcome of the development process: to a certain extent upgraded access and enhanced production capacity, resulting in either more balanced or biased environment for local economy and society.

In a *non-integrated system,* there is little or no co-operation between central and local systems of development. Control is kept in the centre and the local system is underdeveloped and barely institutionalized. This is argued as follows:

1. The vast majority of *central resources* are delivered by policies and institutions of the *central system*directly to the beneficiaries.
2. Large amounts of these resourcesare invested into tackling *access-type disadvantages* however; they aim largely the improvement of physical access.
3. There are also large sumsfor local economic development, however, mostly in the form of simple normative payments (production subsidies), which are ineffective and can carry significant dysfunctions.
4. Very few resourcesare assigned to the reinforcement of local development institutions or to unlock latent local development resources.
5. The *local system* of rural development is weak, hardly institutionalized and does not have adequate resources to release local development potentials.
6. Thus, much of these remain unexploited and the added valueof *local resources* (or rural values) remains small.
7. The contribution of the local system to the elimination of *resource-type disadvantages* is not likely to be significant.
8. Non-physical access, backing the local economy and rural products to penetrate global markets can also expect little or no support.

All these can lead to unbalanced development where, in a certain rural locality, access (especially physical access) improves much faster and further than production capacity. Here we end up in a vicious circle. If there is nothing to sell, then rural areas cannot withstand the competition brought by improved access, and finally most values that have been preserved by rural area are likely to be lost. In this case, rural development is not successful and central policies fail to fulfill their role.

In an *integrated system*, local and central development systems should work in a dynamic cooperation with each other. Control, resources and responsibilities should be dispersed throughout different levels of the system. The existence of advanced local development institutions is a necessary condition in this model.

1. *Redistributed resources*are still channeled through the *central system,* although their allocation is quite different.
2. A significant share of resourcesis still directly spent on tackling *access type* (mainly physical) disadvantages.
3. However, those resources, allocated for supporting local economic development directly from central sourcesrepresent a much smaller share of the budget. They are still normative payments, but rather aiming at the maintenance of public goods (Agri-environmental schemes, for example) than simply subsidizing conventional agricultural production.
4. A significant part of central resources is devoted to the reinforcement of the local development institutions and the unlocking of local resources. As a result, the *local development system* is well advanced and institutionalized.
5. It is able to invest in the protection of rural values and their utilization in the development process.
6. Like this, *local resources* can be exploited and can contribute with considerable added value to the development process.
7. This value flows into the economic resource base of the local area, creating marketable products and greatly reducing *resource-type disadvantages*.
8. At the same time, the local development system can also make a significant contribution against *access-type disadvantages*, primarily improving business and policy access, for the benefit of the local area.

🕮All this can lead to a much more balanced development. The production capacity of the locality is reinforced and a two way access (from as well as into the locality) is provided. Thus the rural area, utilizing its resources and finding its segment of the market can become independent, keep its population and sustain its values for the future.

Therefore, there are three main differences can be highlighted between integrated and non-integrated models.

1. The *flow of resources*,
2. The *flow of information*, and
3. The *level of advancement and/or institutionalization*of local development systems.

The difference concerning *resource-flows* is quite obvious. In the non-integrated model the central system distributes the vast majority of the budget directly through its administrative institutions, applying strict bureaucratic control and simple indicators all the way down to the beneficiaries. The inevitable result is low effectiveness, since much of the money cannot reach those places where it is most needed. At the same time, lacking central financial resources and technical/political support, local systems are not reinforced and there is often insufficient capability to unlock local development resources, or even to absorb central aid. Consequently, the value added of the local system to the development process remains small.

In an integrated model, a significant part of the budget is not delivered directly by central policies, but channeled through the local development system. This strengthens this system and allows for the reinforcement of local institutions and social networks, etc. It can also directly provide financial aid for the exploration and exploitation of local resources for local economic development. All this can result in the rapid growth of local added value and the expansion of available development resources, for the development system as a whole.

By including the *flow of information* in the model, the differences of effectiveness between integrated and non-integrated development can be partly explained. Accurate and detailed information about problems and possibilities, disadvantages and resources is the key starting point for any action in rural development. For making appropriate strategic and operational decisions about development, information has to be collected, processed and analyzed centrally. For tackling resource-type or some non-physical-access-type disadvantages, masses of very diverse information should be handled from a large number of rural localities. Information would be needed not only about access- and resource-type disadvantages, but also on many other aspects, such as conditions of social networks, local development institutions, condition of the local value bases, and so on. Moreover, taking this logic further, different level institution of the central system should monitor and control each of the development projectsas well. This would involve huge diversity, large number of decisions and huge transaction costs, creating enormous difficulties for normal bureaucratic institutions. Possible (usual) solutions are: fighting mainly those disadvantages, which are easier to grasp without detailed information of a qualitative nature (problems of physical access, for example); supporting large projects instead of small ones; or to give normative payments based on simple quantitative indicators and political decisions, rather than detailed, quality information. Nevertheless, all these result in low effectiveness, significant gaps in the development process and the exclusion of certain activities, social groups and geographic areas from central aid.

## Models of Agricultural Development

Prior to this century, almost all increase in food production was obtained by bringing new land into production. By the end of this century almost all of the increase in world food production must come from higher yields -from increased output per hectare. In most of the world, the transition from a resource-based to a science-based system of agriculture is occurring within a single century. In a few countries, this transition began in the nineteenth century. In most of the presently developed countries, it did not begin until the first half of this century. Most of the countries of the developing world have been caught up in the transition only since mid-century. The technology associated with this transition, particularly the new seed-fertilizer technology, has been referred to as the “*Green Revolution*”.

During the remaining years of the twentieth century, it is imperative that the poor countries design and implement more effective agricultural development strategies than in the past. A useful first step in this effort is to review the approaches to agricultural development that have been employed in the past and will remain part of our intellectual equipment. The literature on agricultural development can be characterized according to the following models: (1) the frontier, (2) the conservation, (3) the urban-industrial impact, (4) the diffusion, (5) the high-payoff input, and (6) the induced innovation.

## *Frontier model*

Throughout most of history, expansion of the area cultivated or grazed has represented the dominant source of increase in agricultural production. The most dramatic example in western history was the opening up of the new continents -North and South America and Australia- to European settlement during the eighteenth and nineteenth centuries. With the advent of cheap transport during the latter half of the nineteenth century, the countries of the new continents became increasingly important sources of food and agricultural raw materials for the metropolitan countries of Western Europe.

Similar processes had occurred earlier, though at a less dramatic pace, in the peasant and village economies of Europe, Asia and Africa. The first millennium A.D saw the agricultural colonization of Europe north of the Alps, the Chinese settlement of the lands south of the Yangtze, and the Bantu occupation of Africa south of the tropical forest belts. Intensification of land use in existing villages was followed by pioneer settlement, the establishment of new villages, and the opening up of forest or jungle land to cultivation. In Western Europe, there was a series of successive changes from Neolithic forest fallow to systems of shifting cultivation of bush and grass land followed first by short fallow systems and later by annual cropping.

Where soil conditions were favorable, as in the great river basins and plains, the new villages gradually intensified their system of cultivation. Where soil resources were poor, as in many of the hill and upland regions, new areas were opened up to shifting cultivation or nomadic grazing. Under conditions of rapid population growth, the limits to the frontier model were often quickly realized. Crop yields were typically low-measured in terms of output per unit of seed rather than per unit of crop area such as Egypt and south Asia, and the wet rice areas of East Asia. In many areas, the result was increasing misery of the peasantry.

There are relatively few remaining areas of the world where development along the lines of the frontier model will represent an efficient source of growth during the last two decades of the twentieth century. The 1960s saw the “closing of the frontier” in most areas of Southeast Asia. In Latin America and Africa the opening up of new lands awaits development of technologies for the control of pests and diseases (such as the tsetse fly in Africa) or for the releases and maintenance of productivity of soils problem.

## *Conservation model*

The conservation model of agricultural development evolved from the advances in crop and livestock husbandry associated with the English agricultural revolution and the notions of soil exhaustion suggested by the early German chemists and soil scientists. It was reinforced by the application to land of the concept, developed in the English classical school of economics, of diminishing returns to labor and capital. The conservation model emphasized the evolution of a sequence of increasingly complex land-and labor-intensive cropping systems, the production and use of organic manures, and labor-intensive capital formation in the form of drainage, irrigation, and other physical facilities to more effectively utilize land and water resources. Until well into the twentieth century the conservation model of agricultural development was the only approach to intensification of agricultural production available to most of the world’s farmers. Its application is effectively illustrated by development of the wet-rice culture systems that emerged in East and South East Asia and by the labor-and land-intensive systems of integrated crop-live-stock husbandry which increasingly characterized European agriculture during the eighteenth and nineteenth centuries. During the English agricultural revolution more intensive crop-rotation systems replaced the open-three-field system in which arable land was allocated between permanent crop land and permanent pasture. This involved the introduction and more intensive use of new forage and green manure crops and an increase in the availability and use of animal manures. This “new husbandry” permitted the intensification of crop-livestock production through the recycling of plant nutrients, in the form of animal manures, to maintain soil fertility. The inputs used in this conservation system of farming –the plant nutrients, animal power, land improvements, physical capital, and agricultural labor force-were largely produced or supplied by the agricultural sector itself.

Agricultural development, within the framework of the conservation model, clearly was capable in many parts of the world of sustaining rates of growth in agricultural production in the range of 1% per year over relatively long periods of time. The most serious recent effort to develop agriculture within this framework was made by the people’s republic of china in the late 1950s and early 1960s. It became readily apparent, however, that the feasible growth rates, even with a rigorous recycling effort, were not compatible with modern rates of growth in the demand for agricultural output-which typically fall in the 3-5 remains an important source of productivity growth in most poor countries and an inspiration to agrarian fundamentalists and the organic farming movement in the developed countries.

## *Urban-industrial impact model*

In the conservation model, location variations in agricultural development are related primarily to differences in environmental factors. It stands in sharp contrast to models that interpret geographic differences in the level and rate of economic development primarily in terms of the level and rate of urban-industrial development.

Initially, the urban-industrial impact model was formulated in Germany by J.H. Von Thunen to explain geographic variations in the intensity of farming systems and the productivity of labor in an industrializing society. In the united states, it was extended to explain the more effective performance of the input and product markets linking the agricultural and nonagricultural sectors in regions characterized by rapid urban-industrial development than in regions where the urban economy had not made a transition to the industrial stage. In the 1950s, interest in the urban-industrial impact model reflected concern with the failure of agricultural resource development and price policies, adopted in the 1930s, to remove the persistent regional disparities in agricultural productivity and rural incomes in the united states.

The rationale for this model was developed in terms of more effective input and product markets in areas of rapid urban-industrial development. Industrial development stimulated agricultural development by expanding demand for farm products, supplying the industrial inputs needed to improve agricultural productivity, and drawing away surplus labor from agriculture. The empirical tests of the urban-industrial impact model have repeatedly confirmed that a strong non-farm labor market is an essential prerequisite for labor productivity in agriculture and improved incomes for rural people.

The policy implications of the urban-industrial impact model appear to be most relevant for less developed regions of highly industrialized countries or lagging regions of the more rapidly growing LDCs. Agricultural development policies based on this model appear to be particularly inappropriate in those countries where the “pathological” growth of urban centers is a result of population pressures in rural areas running ahead of employment growth in urban areas.

## *Diffusion model*

The diffusion of better husbandry practices was a major source of productivity growth even in pre-modern societies. It includes the diffusion of crops and animals from the new world to the old-potatoes, maize, cassava, rubber- and from the old world to the voyages of discovery and trade from the fifteenth to the nineteenth centuries. The diffusion approach rests on the empirical observation of substantial differences in land and labor productivity among farmers and regions. The route to agricultural development, in this view, is through more effective dissemination of technical knowledge and a narrowing of the productivity differences among farmers and among regions.

The diffusion model has provided the major intellectual foundation of much of the research and extension effort in farm management and production economics since the emergence, in the latter years of the nineteenth century, of agricultural economics and rural sociology as separate sub-disciplines linking the agricultural and the social sciences. Developments leading to establishment of active programs of farm management research was making only a midst contribution to agricultural productivity growth. A further contribution to the effective diffusion of known technology was provided by rural sociologists’ research on the diffusion process. Models were developed emphasizing the relationship between diffusion rates and the personality characteristics and educational accomplishment of farm operators.

Insights into the dynamics of the diffusion process, when coupled with the observation of wide agricultural productivity gaps among developed and less developed countries and a presumption of inefficient resource allocation among “irrational tradition–bound” peasants, produced an extension or diffusion bias in the choice of agricultural development strategy in many LDCs during the 1950s. During the 1960s, the limitations of the diffusion model as a foundation for the design of agricultural development policies became increasingly apparent as technical assistance and rural development programs, based explicitly or implicitly on this model, failed to generate either rapid modernization of traditional farms and communities or rapid growth in agricultural output.

## *High-payoff input model*

The inadequacy of policies based on the conservation, urban-industrial impact, and diffusion models led, in the 1960s, to a new perspective which argue that the key to transforming a traditional agricultural sector into a productive source of economic growth was investment designed to make modern, high-payoff inputs available to farmers in poor countries. Peasants in traditional agricultural systems were viewed as rational, efficient resource allocations. This iconoclastic view was developed most vigorously by T.W. Schultz in his controversial book transforming traditional agriculture. He insisted that peasants in traditional societies remained poor because, in most poor countries, there were only limited technical and economic opportunities to which they could respond. The new, high-payoff inputs were classified according to three categories:

* + - The capacity of public and private sector research institutions to produce new technical knowledge
		- The capacity of the industrial sector to develop, produce, and market new technical inputs, and
		- The capacity of farmers to acquire new knowledge and use new inputs effectively.

The enthusiasm with which the high-payoff input model has been accepted and translated into economic doctrines has been due in part to the proliferation of studies reporting high rates of return to public investment in agricultural research. It was also due to the success of efforts to develop new, high-productivity grain varieties suitable for the tropics. New high-yielding wheat varieties were developed in Mexico beginning in the 1950s, and new high-yielding rice varieties were developed in the Philippines in the 1960s. These varieties were highly responsive to industrial inputs, such as fertilizer and other chemicals, and to more effective soil and water management. The high returns associated with the adoption of the new varieties and the associated technical inputs and management practices have led to rapid diffusion of the new varieties among farmers in a number of countries in Asia, Africa and Latin America.

## *Induced Innovation Model*

The high-payoff input model remains incomplete as a theory of agricultural development. Typically, education and research are public goods not traded through the marketplace. The mechanism by which resources are allocated among education, research, and other public and private sector economic activities was not fully incorporated into the model. It does not explain how economic conditions induce the development and adoption of an efficient set of technologies for a particular society. Nor does it attempt to specify the processes by which input and product price relationships induce investment in research in a direction consistent with a nation’s particular resource endowments.

These limitations in the high-pay off input model led to efforts to develop a model of agricultural development in which technical change is treated as endogenous to the development process, rather than as an exogenous factor operating independently of other development process. The induced innovation perspective was stimulated by historical evidence that different countries had followed alternative paths of technical change in the processes of agricultural development.

# STRATEGIES & POLICIES OF AGRICULTURAL & RURAL DEVELOPMENT

##  Strategies of agricultural and rural development

There are basically four important strategies of rural development, which are most important for the developing countries. The strategies are the following.

### Growth Oriented Strategy

This is based on the philosophy that rural people, like any other people, are rational decision makers, who, when given adequate opportunity and a proper environment, will try to maximize their incomes. The role of the state in this strategy is to build infrastructure, and maintain a favorable climate to stimulate the growth of rural enterprises. The critical assumption of this strategy is that the benefits of increased production will gradually ‘trickle down’ to the poor. The regulation and coordination of the activities of private and public agencies is primarily through market mechanisms. This paradigm formed the basis of the predominant agricultural development strategies in developing countries.

### Welfare Oriented Strategy

This seeks to promote the well-being of the rural population in general, and the rural poor in particular, through large-scale social programmes like the minimum needsprogramme,nutrition programme, etc. The primary means used in this strategy are free provision/ distribution of goods, services and civic amenities in rural areas. The critical assumptions of this strategy are that people are not competent to identify and resolve their problems, and that government specialists can identify their needs and meet them with the financial and administrative resources available with the government. The role of villagers is that of passive receptors of services. This strategy has a paternalistic orientation. The performance of the programmeis judged by the quantity of goods, services, and civic amenities delivered.

### Responsive Strategy

This is aimed at helping rural people help themselves through their own organizations and other support systems. Its concern is with responding to the felt needs of the rural people, as defined by them. The role of the government is to facilitate the self-help efforts of villagers by providing technologies and resources that are not locally available. The critical assumption of this strategy is that the rural poor will identify and resolve their own problems if provided with minimal support and other wise left to their own devices and initiatives. Community participation in, and control of, project activities is the primary performance indicator of this strategy.

### Integrated or Holistic Strategy

The rural and agricultural centered development will be integrated approach not only on injecting new and more productive technology but also on promotion of human development, infrastructure building, market development, and others.

Therefore, this strategy combines all the positive features of the earlier three strategies, and is designed to simultaneously achieve the goals of growth, welfare, and equity and community participation. This paradigm takes a very comprehensive but integrated view of the basic problem of poverty, unemployment and inequality, and seeks to address the physical, economic, technological, social, motivational, organizational and political bases of these problems. The multiple goals of this strategy are sought to be achieved by building the capacity of the community to involve itself in development in partnership with the government.

## Polices of agricultural and rural development

Policy is defined as a deliberate course of action, as contrasted with a haphazard type of activity followed by a public body, private firm, family or individual. Policy generally implies wisdom in managing affairs, based on a definitive plan or programme created through a process of thought and reason. It is a universal activity of rational individuals, families and firms, political movements, organized groups, governments, and agencies of government.

**Elements of Policy**

Policy involves planning based on certain beliefs, values and goals, taking into account the resources that may be available for reaching the goals, and the benefits and costs of using one plan or another. The basic elements of policy involve the following.

1. Goals that may be established,
2. Means that may be used to reach these goals,
3. Implementers such as agents or agencies that activate and control the means, and
4. Constraints that are applied to the plan or programme.

🕊Therefore, the basic concept of policy is that of deliberate action or activity involving these above four elements.

**Agricultural Policy:**

Agricultural policy, which is regarded as an important area of public policy, is defined as a course of public action directed primarily but not exclusively towards the farm and agribusiness sectors of society. It involves the full range of public decisions that influence individuals and firms to decide what products shall be produced, how they shall be produced, and for whom.

Agricultural policy applies to two broad sets of markets.

1. Agricultural Input Markets: Through which the resources and commodities used in farming are made available for production. Policy in the input markets applies to the use of land and other natural resources, agricultural credit, industrial products used by agriculture, and the human resources employed in all sectors of agriculture.
2. Agricultural Product Markets: Through which farm products are marketed and processed for consumption at home and abroad. Policy in the product markets involve a broad range of laws, government rules and regulations that apply to these markets.

**Need for Agricultural Policy**

Agricultural policy is required mainly due to the following reasons.

1. Increasing the productivity of agriculture is essential for meeting the growing world demand for food, and governments are widely and deeply involved in helping almost all sectors of agriculture to increase their productivity.
2. Economic stability is important and is the responsibility of policy.
3. The government policy greatly influences income distribution.

**Purpose of Studying Agricultural Policy**

Because of the importance of agricultural policy in influencing our lives, study of agricultural policy is of great importance to policy makers. The two parts of policy study involve vision and analysis of possible policy choices. Vision and analysis are both important, and we study policy to broaden and sharpen our vision, and to improve our competence in analysis.

### Farm/agricultural output price policy

Price policy is designed to influence the level and stability of the price received by farmers and paid by consumers for farm outputs. It is a very important factor since it influences the entire fabric of an agriculture economy. In general, it has three main functions:

* ***Allocation of farm resources***: it follows from the optimization behavior of producers in a market system described by neoclassical production economics as “increase in the general level of output prices increases returns to all inputs in production, encouraging higher use of variable inputs”.
* ***Income distribution***: it follows from the implication that high farm prices raise producer income and lower the real incomes of consumers.
* ***Determination of the level of investment and capital formation in agriculture:*** this looks into the long-run cumulative effects of high farm output prices – high farm prices relative to those in other sectors increase the rate of return to capital in agriculture and encourage investment in various ways. Besides, it permits saving at farm household level across seasons, encourages the flow of credit into agricultural activities.

**Objectives of output price policy**

Primary objectives of the policy include:

* To influence agriculture output
* To achieve desired changes in income distribution
* To influence the role and contribution of the agriculture sector to the overall process of economic development

Secondary objectives include:

* To increase aggregate agriculture output (across all crops and enterprises)
* To increase the output of individual crops (export versus food crops, perennial versus annual crops, etc)
* To stabilize agricultural prices, both in order to reduce uncertainty for farmers and to ensure stable food prices for consumers.
* To stabilize farm incomes, as distinct from price stability.
* To achieve food self-sufficiency (it has links with the above)
* To generate government tax revenue either from export taxes or import taxes
* To generate or save foreign exchange, and thus to contribute to the balance of payments.
* To ensure that the manufacturing sector is supplied with cheap food and raw materials in order to accelerate the pace of industrial growth.
* To maximize the investible surplus that can be extracted from agriculture for investment in manufacturing sector.

**Instruments of price policy**

The description of price policy instruments is followed by some observations concerning the interaction between instruments, and the relationship of instruments to objectives. Farm output prices can be altered by government intervention in many different ways. Instruments are grouped here according to their type of impact on the level and stability of farm prices.

1. **Trade policy instruments**

These instruments affect domestic agricultural prices by operating on the prices or quantities of either imports or exports. They include:

* Import taxes or subsidies, which increase or decrease domestic prices by raising/lowering the cost of imports in domestic currency;
* Quantitative restrictions on imports, which raise the domestic price above the import prices;
* Export taxes, which are taken out of the FOB export price and which lower the domestic price passed back to producers.
1. **Exchange rate policy instruments**

The official conversion rates between the national and foreign currencies have a major impact on the domestic prices of trade-able agricultural commodities, and this impact is the same in direction for both import substituting and export commodities.

* A higher exchange rate (when less domestic currency can be purchased for a given amount of foreign currency) results in a lower domestic currency equivalent of the world market price for both food and export crop.
* A lower exchange rate (i.e. more domestic currency for a unit of foreign currency) results in a higher domestic currency equivalent of world market price.
1. **Taxes and subsidies Instruments**

In addition to import/export taxes, farm output price levels can be affected by many types of domestic tax or subsidy imposed at different points in the marketing chain. Some examples are:

* Local government levy on producers when they sell through specified marketing agents, this levy being deducted from the farm-gate price;
* Tax on the unprocessed commodity at the point of entry into processing;
* Consumption tax levied on the commodities in wholesale markets or at retail outlets;
* Consumption subsidy applied to the commodities at retail outlets;
* Deficiency payment, i.e. the difference between target farm-gate price and actual farm-gate price covered by the government;
1. **Direct interventions**

In addition to fiscal or exchange rate policies, governments frequently seek to influence prices by direct controls on the price formation, marketing, and storage of agriculture commodities. These controls require the creation of public marketing agencies in order to secure control over part or all of the marketed supply of designated commodities. Some examples are:

* + Marketed output confined to sale through state channels at fixed prices;
	+ Enforced procurement by the state at fixed prices;
	+ Fixed or minimum retail prices for staple foods, with supplies being confined mainly to state outlets and penalties for illegal pricing by private traders;
	+ Fixed minimum prices to producers (floor prices) linked to state procurements;
	+ Fixed floor prices to producers and ceiling prices at wholesale or retail, linked to the operation of a buffer stock authority which buys at the floor during harvest season and sells at the ceiling price at times of seasonal shortage.

**Impact and effectiveness of price policy**

* ***Price policy and stabilization***

From many empirical studies across the world, free markets in farm products are notoriously prone to volatile price changes. These occur due to variability in the natural conditions (rainfall, winds, floods, pests, disease) and due to the lag between planting decisions and harvesting of outputs.

Governments seek to stabilize prices for two main reasons. The first is in the production side, which is expected to reduce risk, increased market supply, stabilize farm incomes. The second reason is in the consumption side, which is expected to stabilize wage costs, protect urban poor from malnutrition/starvation welfare effects of price stabilization when supply changes.Figure below shows the welfare effects of price stabilization.

Price

 P2 A

ab

Pe

cd ef

P1 B

gh D

0Q2QeQ1 Quantity

*Where:*

*Peis the equilibrium price*

*P2 is the price when there is deficit supply*

*P1 is the price when there is excess supply*

Accordingly, we can have three situations where to check whether there is a net gain or loss as a result of intervening in the stock authority:

* 1. If a deficit supply situation develops, and supply falls to Q2 – price would have rise to P2 – then sales are made from the buffer stock to keep the price at Pe
		+ Consumer surplus gain = a + b
		+ Producer surplus lose = a
		+ Buffer stock income = d + g
	2. If a surplus supply situation develops, and supply rise to Q1 price fall to P1 purchases are made by the buffer stock to keep price at Pe.
* Consumer surplus loss= c + d + e
* Producer surplus gain = c + d + e + f
* Buffer stock cost = e + f + h
	1. Summary position of the welfare and resource changes is:
* Buffer stock cancels out = d + g = e + f + h
* Consumer surplus loss = d (because c + e = a + b)
* Producer surplus gain = d + e + f (because a = c)
* Net welfare gain = e + f
	+ Thus, the conclusion is that price stabilization yields a net social welfare gain.

### Marketing Policy

The marketing of farm output is typically thought to play a dual role. One dimension is the transmission of price signals between consumers and producers. As an example, an increase in demand for maize causes prices to rise in an urban center and this information is passed back to producers through the marketing system. The other dimension is the physical transmission of the commodity from points of production by farmers to points of purchase by consumers.

The traditional starting point for analysis of markets is the concept of adding utility to a commodity. This is achieved in three ways:-

1. ***Form utility***: changes in the physical attributes of the commodity between farmer and consumer (grain to bread) as compared to its sale by farmers through grading (sorting, cleaning, labeling, packaging, etc)
2. ***Place Utility***: at a different place from its point of sale by farmers through transporting a product from one place to another. Transport distances may be local, medium, or long distance.
3. ***Time utility***: at a different time from its harvests and sale by farmers through storing a produce. This refers to all aspects of storage across seasons and across years.

Then, if a product passes through any or all of these stages and adds utility its price is expected to vary at various levels. The overall difference between the purchase price of a commodity by consumers and its sale price by producers is called the ***marketing margin***. The marketing margin covers part or all the above utilities/dimensions of marketing and can sometimes be used as the sum of seasonal margin, a spatial margin, and a form margin respectively.

The ***seasonal margin*** refers to all aspects of storage across seasons (inter seasonal storage) and across years (inter-year storage). Storage has costs and risks. Storage costs consist mainly of the money tied up in the stocked commodity, the quantity and quality losses of commodity that rise over time, and the accounting costs of capital invested in storage facilities. Storage is risky because future prices may not rise sufficiently to compensate for the costs involved.

The ***spatial margin*** refers to all aspects of the transport commodities from location of sale to location of final purchase. Transport distances may be local, medium distance, or long distance. Distances and costs depend on the location of surpluses and deficits, and on the type of commodity (for example, light versus bulk commodities, durable versus perishable commodities). Like storage, transport involves risks concerning price differences between origin and destination, and, for perishables, the condition of the commodity on arrival.

The ***form margin*** refers to all changes in the physical attributes of the commodity between farmer and consumer. It includes not only direct processing but also cleaning, sorting, labeling, packaging, canning and others. The form margin varies greatly between commodities, and is also the one that changes most as development proceeds due to changing demand patterns as incomes rises.

The marketing systems are more typically thought of as vertical commodity systems or marketing channels, in which the commodities passes through a sequence of stages/events. The main sequential stages in marketing are: -

* 1. ***Primary procurement*** (assembly), in which the commodity is purchased from farmers and assembled at local village, or district level stores, or mills;
	2. ***Processing***, in which the commodity is milled or transformed prior to onward distribution;
	3. ***Wholesale***, in which the commodity changes hands in bulk at wholesale markets;
	4. ***Retail***, in which the commodity is sold to its direct consumers; and

**Objectives of marketing policy**

The objectives of government intervention in agricultural marketing are closely related to perceptions about the structure (number, size and diversity of participants), conduct (reliability, timeliness, quality) and performance (speed and accuracy of price adjustment, the stability of prices and margins, etc) of private marketing channels. The objectives most commonly advanced for government marketing policies are:

* To protect farmers and/or consumers from parasitic traders
* To stabilize or increase farm-gate prices
* To reduce the marketing margin (to narrow the gap between consumer and producer prices)
* To improve quality and minimum standards of consumable or exportable agricultural commodities (more of regulatory than direct intervention)
* To increase food security (traders hoard grain for speculative purposes, which exacerbates food shortage and increase price instability)

**Instruments of marketing policy**

Governments of developing countries have used different instruments to influence the working of agricultural marketing channels. These range from replacing private channel by state institutions, through partial involvement of state bodies, licensing and minor regulator like quality, grading and hygiene. The following describe various types of intervention:

***Monopoly Parastatals***: includes all those government–owned institutions that represent some form of monopoly control over one or other stage of the marketing system through marketing boards (for traditional export crops such as coffee, tea, etc). Organization of this kind may vary widely in handling of the stages of marketing:-

* + It may be at the final sale to foreign buyers at FOB export, or
	+ It may handle all stages of marketing, processing and final sale from producer to the consumer or to export.

**Non-monopoly Parastatals:**includes wide range of different institutions that provide one particular channel, but not the exclusive channel, through which crop sales by peasants are transferred to consumers like through state buffer-stock authority for staple food grains. This is to implement effective floor and ceiling prices for major food grains.

***Farmer cooperatives*:** the task of farmer cooperatives is to undertake procurement (assembly) stage of marketing for onward delivery to licensed processors/designated parastatals. Sometimes it is compulsory for all farmers in a particular location, or growing a particular crop like coffee, tealeaf and others to belong to designated cooperatives.

***Trader licensing*:** where the state does not take itself direct responsibility for marketing, it sometimes tries to control the private trade by licensing designated enterprises. Licenses are both a source of state income and a threat (deceiving). The source of income is the license fee, often supplemented by the bribes needed to secure the license in competition with other traders. The threat is the loss of the license if the trader is perceived not to be playing the game according to the way that state officials wish to see it played.

***Instruments to improve market conduct and performance***

This category of state intervention in marketing includes, among many things:

1. The provision of improved information to marketing system participants through medias (newspaper, radio, TV, etc.)
2. Regulatory function of setting and enforcing quality standards, weights, measures and hygiene.
3. Provision of marketing facilities such as floor spaces, auction rooms, weighing equipments, etc.

### Input Policy

Variable input policies have four dimensions:

* 1. ***Price level of variable inputs***, concerns state actions to influence the prices paid by farmers for inputs
	2. ***Delivery system for variable input***, concerns state actions to improve the physical flow of inputs to farmers.
	3. ***Information provision*** to farmers concerning the type, quantity and combination of inputs
	4. ***Credit*** for the purchase of variable inputs

New seeds, fertilizers and irrigation water are complementary input – meaning the highest levels of yield are only achieved by the simultaneous increase of all variable inputs in the correct proportions. If one is missing the intended result will not be achieved. The complementarities of the variable inputs lead to the idea of delivery of an ***input package*** to farmers to achieve desired output. The package approach envisages a major role for the state: investment in public irrigation schemes, delivery to farmers of certified seeds together with the appropriate quantities of fertilizers and other farm chemicals, provision of credit, and advice concerning the proper agronomic practices to put into effect.The package approach to inputs has become less prevalent because of high overhead cost per farmer, insensitivity to local variations in soil and climate, insensitivity to pre-existing farming systems, failure of credit repayment and input delivery.

**Objectives of input policy**

In line with the preceding discussions, the objectives of state intervention in input markets can be distinguished between general and specific, and betweenfarmers, input market, and input supply dimensions as:

***General:*** to accelerate and make more uniform the adoption of new technology by farmers.

***Specific****:****Farmers****:*

* To overcome risk-averse behavior by farmers
* To avoid mistakes in input use by farmers that might happen on a trial-and error basis.
* To avoid the adoption of wrong/dangerous inputs by farmers.

***Input markets:***

1. To provide a delivery system for inputs under conditions where private markets in farm inputs are non-existent, unevenly developed, or non competitive.
2. To combine input delivery with credit provision in order to alleviate the working capital constraint on the adoption of new inputs.
3. To regulate and control the market for improved seeds, in order to ensure the genetic quality of named varieties in seed replication and seed delivery to farmers.
4. To regulate and control the market for improved pesticides or disease-control chemicals in the context of measures designed to contain the spread of pests and diseases in crops grown under monoculture or near monoculture conditions.

***Input Supply:***

1. To maximize the use of domestic rather than imported supplies of farm inputs.
2. To provide a sales outlet, perhaps at subsidized price, for a high cost domestic industry that is protected from import competition by import taxes or an import ban.

**Instruments of input policy**

Instruments of input policy can be grouped into three dimensions:

* + - The prices that farmers pay for variable inputs
		- Delivery of farm inputs, whereby the state may wholly or partially replaces private agents in the distribution system for inputs.
		- Provision of information on inputs to farmers, which in most developing countries is t

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		***Input price policy***
1. ***Price fixation:*** Prices may be fixed ex-factory when delivery takes place through private channels, or may be fixed at the farm-gate when delivery is by state agencies. Price fixing may apply only to major strategic inputs such fertilizer, or may be implemented across a range of purchased variable inputs. Purpose of price fixation is first to reduce the price instability of inputs and second to ensure that all farmers pay the same price.
2. In addition to fixing prices, most governments have ***subsidized*** for inputs such as fertilizer. Rates of input subsidy can vary over a wide range from quite low levels to over 50%. The subsidy may be paid at importation (imported inputs) to domestic manufacturing industry or to state input distribution agency.
	* + 1. ***Input delivery systems***

State delivery agencies for farm inputs can take many different forms:

* In some cases, input delivery is combined with crop marketing, research and extension in crop-specific parastatals,
* In others, inputs delivery is handled by branches of the state credit agency, while extension is run by Ministry of Agriculture
* In others, cooperatives system has a role to play as exclusive final distribution of inputs to farmers.
	+ - 1. ***Information on inputs***

Lack of practical and relevant information has long been recognized as a significant barrier to rapid and widespread adoption. The traditional methods of conveying new information to farmers relies on the government extension services through extension officers each of whom is allocated a district with in which to provide device and carry out training for farmers.

### Credit Policy

Credit is a sum of money in favor of the person to whom control over it is transferred. It involves two parties: a lender and a borrower. It also involves a price for the transfer of control over money, which is the interest rate. The market for credit contains a demand schedule, a supply schedule and a price (interest rate) that adjusts to bring demand and supply into balance.

***Credit versus capital and farm input***: credit is not capital but it can be used, among other things, to make an investment such as buying an irrigation pump, which is capital. Credit is not farm input but it can be used, amongst other things, to improve the ability of farmers at critical times of the year to buy these inputs. This is calledfungibility meaning the interchangeability of the uses to which credit can be put.

The process of saving, lending and borrowing is called*financial intermediation*. It is a process in which debt claims by savers over lenders are converted into debt claims by lenders over borrowers. The institutions that enable this to take place by bringing together savers and borrowers with differing needs in space and time are called financial intermediaries. Credit may be informal, or formal, private or state in origin. Informal credit channels refer to the financial services provided by money lenders (as an example the rich farmers, traders and others); formal credit channels are those bound by the legal regulations of a country, and they include private banks, state banks, registered cooperatives, and a host of others. The entire system of institutions and the way they work is called*rural financial system*.

Credit transactions are not costless, and there is no single rate of interest that covers the costs of and returns to the three principal actors- borrowers, lenders and savers in the system. Instead, each type of participant faces what are called*transaction costs*, and the rates of interest diverge in order to allow for the recoupment of these costs by the intermediary.

**Objectives of old credit policy**

* To alleviate a critical constraint hampering growth in agricultural output, this constraint being lack of cash to make needed farm investment (irrigation, drainage, pumps, tractors, buildings) and to purchase modern variable inputs (fertilizer, pesticides, fuel, feeds, etc);
* To replace the fragmented and incomplete rural financial market represented by private moneylenders, these credit sources supposedly having the effect of impoverishing their clients rather than assisting them to improve productivity;
* To accelerate the adoption of new technology by peasant farmers, by providing working capital for the seasonal purchase of variable inputs, and then optimizing the complementarities between inputs.
* To assist small farmers to overcome their inability to borrow from commercial or informal credit sources, due to lack of collateral and lack of information;
* To provide short-term credit in order to bridge seasonal and temporal cash shortfalls of small farmers, compared to the medium and long-term lending preferences of commercial financial institutions;
* To achieve equity goals, whether these are related to intra-rural, inter-regional, or rural-urban income distribution;
* To offset the disincentive effects for small farmers of policies unfavorable to them including low output prices, over-valued exchange rates, and inefficient market interventions by state;
* To gain favor with farmers for political purposes, including forthcoming elections, and so on;
* To take advantage of the sometimes-overwhelming generosity of foreign aid donors, who seem to be, prepared to pump large amounts of money endlessly into rural credit project.

**Instruments of old credit policy**

The institutions created or regulated by the state (state agricultural banks, multi-purpose development agencies, crop and project authorities, commercial banks, cooperatives and farmer groups) in order to deliver credit to farmers represent by themselves a type of instrument for implementing credit objectives. The ways these institutions operate, and the constraint imposed on them by government policy, also involve more specific instruments for achieving goals such as output growth, equity, small farm coverage, and short-term credit. Some main instruments of state credit policy in developing countries are:

1. ***Low interest rate***: one of the popular instruments of credit policy in developing countries has been to subsidize the rate of interest on loans to farmers. The reason for this is the belief that the demand for credit by small farmers is highly sensitive to the interest rates, i.e. demand for credit is very elastic. Then the only way to get farmers to make more use of credit is to lower interest rates.
2. ***Credit targeting***: the orientation of credit policy towards small farmers involves extensive use of targeting devices. In more general credit schemes, the target group may be defined according to various criteria such as farm area or family income.
3. ***Loan portfolio regulations***: governments to restrict the decision-making flexibility of financial institutions or to try to enforce compliance with state objectives may use various devices. These types of device are usually associated with state regulation of private banking system, but some of them may be applicable also to state credit agencies. The devices are first to set a minimum to the proportion of agricultural sector loans out of total loans; second to stipulate maximum permissible loan sizes; and third to place restrictions on the term structure of the loan portfolio, such that the major proportion of total loans are short-term loans.
4. ***Miscellaneous***: governments can use many other instruments in order to try to fulfill specified goals related to the provision of credit to farmers. Sometimes credit is provided in kind. This is in order to overcome the problem of fungibility, but it is unlikely to be successful, because if the farmer really wants to realize money for other purposes, the physical credit will be sold for cash.

### Irrigation policy

Irrigation is about the supply and demand for water as a variable input into crop production. Irrigation policy is about the role of the state in promoting or providing irrigation facilities. It is also about policy choices that exist with respect to alternative irrigation technologies, the management of large-scale irrigation schemes, and alternative methods for recouping from farmers the cost of providing them with irrigation.

Irrigation may be defined as the use of human technology to increase and to control the supply of water for crop production. In most cases, irrigation is supplementary to the naturally occurring supply of water to crops from rainfall. However, there are important examples - in arid and desert regions - where there would be no crop production at all in the absence of irrigation.

**Objectives of irrigation policy**

Irrigation involves increasing the supply of water to crops and evening out the supply of water over time. Assuming that these functions are achieved, the potential contributions of irrigation towards farm output growth can be summarized as follows:

1. Irrigation reduces risk by diminishing the adverse impact of rainfall variation on crop growth and yields.
2. Irrigation increases crop yields directly, by reducing the incidence of water stress in plants caused by uneven water supply, and by its complementary impact in raising the productivity of other variable inputs.
3. Irrigation permits farm output to be increased, because the household can switch to a higher value crop mix, or because higher yielding varieties that are more responsive to high levels of complementary inputs can be cultivated.
4. Irrigation permits a rise in the multiple cropping indexes the average number of crops that can be grown sequentially on a given area of land during an annual cycle by providing a supply of water in dry seasons, and by permitting greater flexibility in the timing of sowing.
5. Irrigation permits previously uncultivated land to be brought into cultivation, by extending the margin of cultivation into semi-arid or arid regions, provided that soils are capable of sustaining crop production in the presence of sufficient water.

Irrigation methods are classified in the first instance according to whether they make use of available *surface water*, or whether they draw up water that is held in the ground, called *groundwater*. The main technology for utilizing surface water is*canal irrigation,*and the main technology for utilizing groundwater is *tube-well irrigation.*

### Land tenure Policy

Different arrangements of rights to the use of land will be induced by different cultures, under different economic conditions, at different times in history. In induced innovation model, demand for changes in institutional arrangements is endogenous or exogenous to the economic part of a social system. When land is plentiful, the territories controlled by a social group over circumstances, the rights to the use of land are likely to be determined by membership, or status in a group, and by use. Different distributional and productivity outcomes arise from the varied rules for the control of resources. Different land holding arrangements include:

* Traditional communal land ownership, use rights, and shifting cultivation: This arrangement involves social control of the land with periodic, or hereditary reallocation of land for use by fanning families;
* Family or individual farming: This arrangement, with full ownership or life time tenure rights, or with various forms of short-term tenancy, predominates in a number of less developed nations;
* Integral or cooperative farming: The income from the firm is distributed on the basis of the ownership of the three sets of productive resources: land, labor and capital;
* Collective farming: This is done with assumption that greater agricultural productivity, more equal income distribution, and better control of “agricultural sector are achieved by transferring land to collective ownership and operation. The income of the collective is distributed to members based usually on some measure of labor contributed.
* The true commune: The arrangement provides the most social control, with all production under group control and a large amount of goods and services provided on the basis of need through group-operated central dining halls, nurseries, recreational facilities, and public housing, with small individual cash allowances to members for personal needs. These types communal ownership require special conditions and motivation.

### Food security Policy

Virtually all policy reform programs focus on the need to increase food and agricultural production. Policy changes, therefore, focus heavily focus on ways to create greater incentives to domestic agricultural production. The initial phase of the policy reform concentrated heavily on changes in agricultural price policy. Non price factors include the availability of desired consumer goods, as well the institutional support required to evoke a large supply response to improved prices, such as effective marketing system, transportation, and financing.

Food policy is broader than agricultural policy as it also focuses on consumption and nutritional issues. A major concern in policy reform dialogue has been the reduction or elimination of consumer subsidies, which have frequently reflected an urban bias. Key elements of the discussion have focused on the need to reduce consumer subsidies in the process ending systems that were frequently unable to provide guaranteed supplies of low cost food.

# THE RURAL DEVELOPMENT POLICIES AND STRATEGIES OF ETHIOPIA

## Goals of Rural Development Policy

Rural development policies are designed to improve the conditions under which rural people work and live. The goals of policies are governed by what people desire, and the measures of policies by what people think the government can and ought to do to bring about the desired change. This is the theory of public policy. Changes are desired only when people do not like the way things are going. Pressure for public action arises when people feel that they, individually, cannot bring about the desired adjustments. They have in mind some ‘norm’, some image of an ideal situation towards which they strive. These norms become the goals of policy towards which objectives of specific programmesare directed.

There are two dominant goals of economic policy; first, increasing the national income, and second, improving the distribution of national income among the members of society. To achieve these, following goals are to be attained.

1. Priority to agriculture and rural development, with a view to generate adequate productive employment and eradication of poverty.
2. Accelerating the growth rate of the economy with stable prices.
3. Ensuring food and nutritional security for all, particularly the vulnerable sections of society.
4. Providing the basic minimum services of safe drinking water, primary health care facilities, universal primary education, shelter, and connectivity to all in a time bound manner.
5. Containing the growth rate of population.
6. Ensuring environmental sustainability of the development process through social mobilization and participation of people at all levels.
7. Empowerment of women and socially disadvantaged groups.
8. Promoting and developing people’s participatory institutions like Local Governments, cooperatives and self help groups.
9. Strengthening efforts to build self-reliance.

The above objectives, which seek to achieve ‘growth with equity’, need to be seen in the context of the following four important dimensions.

* Quality of life of the rural population
* Generation of productive employment
* Regional balance
* Self-reliance

All these objectives seem to be worthwhile, and therefore deserve serious pursuit by policy makers. However, to be of any use to society, these objectives should be translated into specific programmes and projects that are manageable under the existing conditions. Many rural development policies are complex combinations of various goals, different sets of means or instruments, and are limited by various conditions. To understand such policies, we should divide them into several programmes or projects. For each programme, a clearly defined objective may be designated, which a particular government agency should pursue. The programme measures can then be identified and appraised as to whether they are appropriate and efficient in serving the objective, and adapted to the conditions outside the influence of that particular programme. These conditions are often the decisive factor determining whether or not a certain programme is administratively feasible.

## Agricultural Development Lead Industrialization (ADLI)

The agricultural development lead industrialization strategy insists that developing economies are characterized by scarcity of capital and abundance of labor. So any rational and sustainable strategy must focus in sectors which can make the intensive use of the abundant factor (land and labor) and must make efficient and selective use of the scarce factor. The good candidate is agriculture, which makes intensive and extensive use of land and labor and is the major saver of capital.

The application of modern agricultural technology will increase farm production and income. And the level of increase in both output and income will need less resource in agriculture compared to other sectors. This is so because of the fact that the shadow cost of land and especially labor which is intensively used in agriculture is lower than capital. The increase in agricultural production will stimulate agricultural input producing industries. Moreover, cheap and reliable supply of raw material and food items will not keep real wages rate and cost of production down, stimulating other sectors expansion.

So the increased supply of cheap agricultural food and raw material will effectively create the much need capital to sponsor non agricultural sector. But the problem of non agricultural sectors especially manufacturing is that it needs huge imports of machinery and some raw material from foreign countries. But foreign exchange will be the major bottle neck on this side. Fortunately the growing agriculture sector is where developing economies comparative advantage lays. So if they want to improve their foreign exchange position there is no other sector which can provide the maximum foreign exchange at least cost, compared to agriculture.

In short, the increase in agricultural production, export and income through technological and institutional innovation will create a necessary condition for efficient expansion of other sectors and structural transformation. And the development of each sector will create reciprocal forward and backward linkages. Over long time, given inelastic demand for food items and agricultural goods and decreasing income elasticity of demand with income increase: the relative importance of both service manufacturing will dominate agriculture in the long run. So the development of agriculture needs to be processed in order to create a fertile ground for development of other sectors (especially industrialization) in most cost effective and sustainable manner. This is a strategy commonly known as the Agricultural Development Lead Industrialization (ADLI).

The focus of the strategy is to make the engine of the economic development on agriculture because the fuel (resource) that is needed to initiate motion is less costly in agriculture. But other sectors need to follow the lead of agriculture until their capacity is improved so they can take the lead by themselves.

1. Is it possible to increase agricultural production?
2. Is it possible to create increasing demand for agricultural production?
3. Is it possible to create increasing demand for non-farm sector?

But in Ethiopian context two factors also need clear understanding. These are:

1. Is it possible to create productive employment for the increasing labor force in agriculture?
2. Is it possible to relay on static comparative advantage or do we need to think about dynamic comparative advantage in terms of product cycle and technological gap?

The answer to these questions can’t be the same everywhere; as one shoe can’t fit all the foot, but the logic behind these questions need to be explained at this point. Questionone is important because given fixed land the only way we can increase output in sustainable manner is through technological progress. But the implicit question is related to the fact if it is possible to replicate the green revolution in countries like Ethiopia. But technological progress needs to be institutionalized, because what is needed is attained in face high output in sustainable manner? Question two is important because the agricultural demand is price inelastic means technological treadmill works fast and harshly in agriculture. 1% increase in output will result more than 1% decline in price means total revenue will decline when farmers adopt new technology. The only way out is if there is increase in non-farm income to shift the demand curves upward continuously. Given low per capital income, increase in income will result in tremendous increase in demand, which can affectivity counter the effect of technological treadmill.

The agriculture sector has very weak backward linkage. This is because chemical fertilizers and insecticides are very capital intensive so are not economic to produce them in domestic economy. The little backward linkage that can be extorted into elementary farm implements can’t be expected to sponsor the industrialization process. So the forward linkage toward industries which produce consumer goods using labor intensive technology must be strong, if structural transformation is going to be initiated and sustained. The fourth point is related to declining land-labor ratio and asks if it is possible to initiate sustained output and market surplus increase from the very tiny land that families must depend on. And this is related to the first question. But most importantly the fifth question focus on the theoretical issue and application of comparative advantage.

Most of the successful stories of the 21st century was not only using their comparative advantage but was also creating their own new comparative advantage in line with dynamic comparative advantage theories of product cycle and technological gap theories.So it is logical question to ask can we create our comparative advantage or comparative advantage is something we follow and have no say on it?

##  Policy Within agriculture

Any development effort which bypasses the poor will lead to raise instability, chaos and wars, which can destroy the economic dynamics of any economy as observed in many African countries. So the poor must benefit from any economic development and this can be done by using capital intensive technological improvements at high potential areas and subsidize the development of others which fail to benefit (bi-modal approach to rural development). But the lack of capital to invest in mechanization and to pay subsidy for the poor will make such strategy basically impractical. But an alternative strategy which augments the productive capacity of both labour and land of the small scale farmers can increase agricultural production, and this increase in output will directly benefit the farmers and indirectly the whole economy (uni-modal). So the strategy focuses on uni-modal approach to agriculture and rural development.The agricultural strategies are discussed below:

### Land Policy

This strategy agrees that proper use of the scarce land can be made by granting the use and inheritance right on land for all individuals who want to have a small scale agrarian life. The land will be owned by the people and administrated by the state governments as representative of the people. Moreover,when ever land is reclaimed for whatever purpose the users have the right to demand compensation for the investment they made on the land. But also they will have the right to demand alternative land or financial compensation for alternative livelihood. This will avoid the concentration of holding among small rich farmers, will increase efficiency and will save the scarce capital. At the same time, security of tenure will be also improved since farmers have the right to demand compensation for their investment made on land. But additional measures also need to be used to make the land more productive. These include the use of irrigation facilities mainly in moisture stressed areas, application of proper natural resource management and the allocation of labor optimally on all kinds of land. The last point imply use of small scale farming in densely populated areas but resettlement and leased access to private investors in areas with idle land.

### Labor Policy

This implies labor policy have to deal with creating optimal allocation of labor on land. This is use of small scale farming on densely populated areas, resettlement when possible and use of private sector commercial farming on areas with low population density. After that the motivation to work is created, its productivity need to be increased. The last point calls for generation and diffusion of new technology.

The strategy assumes that “basically these days citizens engaged in agriculture do not think of the existence of alternative jobs and they basically practice traditional farming methods inherited from their ancestors. They are fully prepared to be engaged in agriculture. This preparedness is not only because of absence of other alternatives but also love and appreciation of the profession, which has been inherited from generation to generation, is not underestimateable. Therefore, the traditional farmer possesses adequate interest to be engaged in agriculture. It is possible to assume that work preparedness of the farmer is assured”. The main problem is retention of education youth in rural areas.

### Policy on new technology

The fact to use different approaches toward different zones with different ecology, population density and way of living (pastoral and sedentary) is clearly understood on the strategy. The use of land for its comparative advantage will have to be made possible by developing different extensionpackages which can be applied in different areas by choice of the farmer. In this way specialization and diversification can go side by side. But at the same time the policy states that in order to mitigate the impact of risk and to enable efficient utilization of labour and land throughout the year, farmers should also produce different crops. The idea is that farmers need to specialize in few crops in given time. But given the fact that with change in season, the crop which can give a maximum output (revenue) will normally change, this fact will enable them to driest their production between different periods. But given wide ecological diversity within the country different crops will be produced in given point of time and this will result on diversification at national level.

This is clear from the following policy statement of the strategy:

“the packages we provide and the training we conduct to accelerate agricultural development should include division of labor is mainly based on agro-ecological and other differences in which each area focuses on activities that enhance production and growth through area specialization. Regarding production of many outputs simultaneously, it is being practiced by producing different outputs simultaneously within the areas of specialization mentioned before. We follow the direction of agricultural product diversification based on area specialization. Different packages that are suitable for different areas, those that contain different activities to be performed simultaneously, and those that are wide in their scope should be prepared; and our extension and agricultural skills training programs will be based on them. It is a basic direction that enables us to bring about rapid and sustainable growth by making each area produce the maximum development possible and by utilizing our labor power and land continuously throughout the year”.

### Settlement Policy

The policy clearly states that there are five wide ecological setting in the country. These are drought prone areas, high potential areas, pastoral areas, densely populated areas but with fertile land and enough moisture, and sparsely populated areas.

Special works needs to be done in drought prone areas to generate productive employment from farm and off farm sector. But given the lower potential in other alternative, most of the work have to be done in agriculture Proper management of water, proper use of land and other natural resources, with introduction of new technology can solve the problem in the long run. But until then we have to use drought relief and other welfare measures to achieve food security. And use of food for work in environmental conservation practices expect for those who are not able to work can reduce the dependence problem and can improve their livelihood in the long run. Another option on the table is resettlement. However, resettlement programs can be effective if they:

* are done within the same region
* are with full consent of the individual
* are gradual starting with head
* approached in integrated manner
* full care is given for sustainable utilization of natural resource.

This will solve the food insecurity of the resettles directly. But the area that is left by re-settlers will also benefit first due to decrease in labor land ratio and second due to remittance that can be sent from re-settlers to their family. Moreover, the integration of agro-forestation (which can generate income), livestock husbandry and other activist like expansion of honey bee can be effective. But there is need to improve the local breed’s productivity by crossbreeding, improve the availability of vaccination and animal feeder. But there is also an urgent need for effective utilization and management of the available water, with technical help of the government and improved access to credit. These will enable farmers to produce goods that are highly demanded on the market like cash crops and animal feeder from their fragmented and small land.

In high potential areas with adequate water supply the government focus will be on intensive farming using rain water so to produce surplus products which are important for food security. But private incentives for irrigation will be encouraged but they will not government focus. Note that livestock and natural resources management in addition to irrigation are needed in these places too. But the urgency is not as drought prone areas. Moreover areas with small land but reliable water the focus should be on cash crops but government will not force them then helping them technically and financially to choose that path.

In pastoral areas the first emphasis should be on provision of water for both animal and human population. This will reduce the concentration of animal population in few areas where there is better access to water and grazing land currently. This in turn will cause associated natural resource depletion observed in these areas. As the emphasis is on livestock production a livestock extension system and animal health services must be provided explicitly recognizing the nomadic nature of their livelihood. Moreover the use of elected and traditional leaders for coordinating sustainable livelihood and sustainable natural resource management should be emphasized. Additionally the production extension must fully recognize the local knowledge and must work harder to improve the local knowledge.

However, real improvement in pastoral community quality of life on the long run needs permanent settlements. The settlement of pastoral community to sedentary agriculture is hard business. This is so because it does not only need change in location but also change in culture. But sedentary agriculture among pastoral community needs irrigation facility which is expensive to build on low lands. Additionally it needs to be not only with in the same region but also with in the same tribe.

In sparsely populated areas, the settlement of large scale private farms with integrated supply of infrastructure and social services is needed to benefit from the high potential areas. And with conscious understanding between sending and receiving regions interregional settlements can be implemented in the long run, too.

### Integrated development strategy

The rural and agricultural centered development will be integrated approach not only on injecting new and more productive technology but also on promotion of human development, infrastructure building, market development and others.

### Reflection on policy within agriculture

The main interesting point of the labor policy is in its focus on ‘integrated’ solution to problems of low labor productivity.

On land policy, we saw that small scale farmers are more efficient than large scale farmers as they will use intensively the most abundant factor (land and labor) and will save the scarce capital (in line with uni-modal theory). So it is preferable in country like Ethiopia if land concentration is avoided. So collective ownership of land will make sense if farmers are granted use right but not transfer right (by sale). But the problem is related to.

1. Land improvement which is critically needed at current age of population explosion will not happen unless some form of land security is created.
2. The land tenure institution which grants use right for adults is behind the population explosion problem, itself.
3. Factor mobility of both land and labor is hindered and this will have series negative consequence on economic efficiency
4. The fourth question is related to the fact that if farmers need any nanny or patron (state) to tale them how they should live their life.

The strategies promotion of farming and technology development, which reflects the special condition of the area, is a very interesting diversion from current practice. And will probably solve the central problems of the current practice on technology dissemination and adoption. The main problems of the extension package which are applied in Ethiopia are two kinds. First the technology is provided as blanket technology to be applied in all areas although it does not work everywhere.

Second, when we see the ‘integrated’ nature of the rural development policy, it is hardly possible to call it integrated. It is integrated in sense different problem are solved at the same time. But the inter linkage effects are very different on different areas. As result the needed priorities are not the same in all areas. In such reality providing similar social services in all areas does not make the strategy an integrated strategy. If in some areas agriculture is productive but the problem is related to health sector; but in other areas alternative employment and education is needed more than health care, providing the same level of school and health service does not make it an integrated solution than egalitarian solution (from crude sense).

### Marketing policy and reflection on it

The strategy insists that ‘most agricultural products can be widely used for the producer’s own consumption. The producer sells what is left. Rather, under the real conditions of our country, the far larger portion or our agricultural products is consumed by the producers themselves. Even the majority of the farmers do not produce enough for their own consumption. Therefore, substantial parts of the initial result of agricultural development will not need any market since it will be used to fulfill the requirement of the producer’s demand for consumption. Substantial amount of additional agricultural product will be used this way. However, satisfying the producer’s demand for consumption alone cannot serve as a basis for rapid and sustainable agricultural development”. But to improve farmers quality of life by consuming different goods and to purchase farm inputs and implements which can augment his/her output he/she needs to produce behind his/her own consumption needs. This way the farmer can contribute to the national development in addition to improvement of his own life to do so, he/she needs to produce goods which are needed in the market. Currently production is for farmer’s own consumption so the issue of quality is not serious but it needs proper focusing. Moreover the marketing of some leading commodities like coffee is important at international level, so proper attention should be given to marketing.

In long run, the strategy states that, the farmers will specialize and will create reciprocal demand for each other. But in short and medium term the towns of the country must create the demand. And given the low urbanization and per capital income, breaking in to international market will be needed if the full potential of agriculture is to be realized. So agriculture production must be domestic market lead in short run and international market lead, in medium and long run. So production decision must be done by observing market demand first and the producer must have the capacity to adopt his production pattern to very unstable international market. The farmer needs to produce goods which generate high consumer value at a least cost and acceptable selection of outputs that can be produced at acceptable quality, but also includes the use appropriate farm management and post harvest management like processing, packaging and marketing.

But to make sure that the farmer is producing to supply consumer value, the extension package need to include all necessary inputs from production to post production and marketing activities, which can generate him/her high income. If he/she is provided with this complete package he/she will adopt the technology and will produce goods which posses a higher consumer value. “The main thing here is that the research and extension system should be able to develop an attitude and capacity leading to a market, especially international market-led agricultural development”. Moreover, “establishing efficient marketing system which enables to maintain the quality and competitiveness and improving the system continuously is important to ensure rapid and sustainable agricultural development”.

An important element in the market development is the need for national standards based on international standards (for those products which are new at international market, we can introduce our own grade) which does not only increase market penetration capacity but it also reduces the transaction cost of marketing. Moreover, the dissemination of marketing information and the establishment of commodity exchange which facilitate spot and future (forward) markets are critical.

But the establishment of service or general cooperative is given the higher priority on the strategy. The strategy states that “if there are strong cooperatives in country, there can be a high rate of agricultural development and growth and improvement of agricultural marketing system, whereas it will not be an exaggeration to say high rate of agricultural development, growth and improvement of agricultural marketing system is impossible without cooperatives”. This is related to consolidated sell to reduce marketing cost and high bargaining power of the farmer which can save them from any exploitive middle man. But cooperatives need to be created by free will of the members to solve their problem. There is need for financial, technical, managerial (through hired professionals) and other support in addition to promotion of cooperative formation by persuasion. But there is need to avoid political intervention by government official.

But the strategy calls for complementary than competitive role of private sector with cooperatives. It states that in “saying that cooperatives will and have to play decisive role in our agricultural marketing system does not mean that this will be done by them alone or that the private investors will not have any key role in this respect. Rather, unless the key role of the private investors is included, the system may not work at all because there are many holes that cannot be closed by the cooperatives. This role may express itself in the form of retail and whole selling as well as in collecting agricultural products and processing them in factories.” Although for efficient value chain management cooperatives have to take the lead role, the private sector can also play its own complementary role in retail and other miner activities. Moreover private sector can participate in wholesale trade between cooperatives and final consumer or input producers and cooperatives. For exported products the use of brand name and promotion by internationally proclaimed companies is critical in order to enjoy the high price that come with branded product.

**🗣Reflection on marketing policy**

The first problem of the marketing strategy is that it assumes a fairytale that the first increase in output will be for home consumption that for market. Based on that assumption, the policy argues that the first few round increases in output will not need any market development or market at all. In real world of Ethiopia, first if there is subsistence farmer isolated from the market, it is an exception than a norm. Secondthe increase in agricultural production is to be made by using science based modern inputs which have to be bought in the market. Commercialization on input side which by itself needs market development will also need commercialization on output side to cover the financial needs of modern inputs. So technological progress or technological adoption and market development can’t be isolated from one another at any level.

The second short coming of the policy is related to grade and standards. If customer can differentiate 40 to 45 grain qualities, how are you going to enforce 10 or 15 grades of grain? This is like forcing all Ethiopian people to dress traditional cloth in order to attract foreigners. But people have a much larger life than getting truest money beings a show case of a foreigner. In order to encourage export of Teff you need grades which meet international standard but this have no real relationship with domestic grades, how can you force such grades into the economy? If we know there are 5 types of maize how are you going to convince me there are only 2 types? The right path was to understand the scientifically. This may lead to 40 or 45 grades, but over time introduce HVY which have most of the necessary characteristics. If these grains can fetch higher price (given they have all the good quality) and are cost effective (due to R & D done on them) they will be accepted by both customer and producer. Over time few grains will be able to dominate all other grain varieties and the economy will end up with few grains will be able to dominate all other grain varieties and the economy will end up with few grains will be able to dominate all other grain varieties and the economy will end up with few grades and standards. This is the pattern of grade and standard formation followed on more developed economies. These economies started from large number of grade and standards. But now we are trying to adopt such grades in to domestic economy without considering the local reality. In short run export of grain can be done by using international standards but you can’t force it to domestic economy. It is neither needed nor possible.

One cooperatives side, even though cooperatives are an institutional solution to some market failures they are not a magic formula which corrects all market failures. The problems need to be seen from the development of appropriate institutions by choosing from the different menu of institutions than simply focusing on one institution. Second to create efficient cooperatives and to make sure they are efficiently managed the existence of competition on all levels and voluntary membership are necessary. But the strategy even though accepts voluntary membership it pushes for complementary than competitive role by the private sector. But the efficiency of the cooperatives is conditioned on the existence of competitive private sector to serve as check on their inefficiency and vise verse.

### Policies on NGO’s and community development, and reflection on it

The policy does not have any deep analysis about role of NGO (Civil society) in rural development. It simply insists that the NGO (civil society) could be used in fund raising and implementing projecting projects selected by kebele but which are behind their capacity. NGOs (civil societies) have to fit themselves into the priority of the kebeles decision. They are assumed as instrument to access funds and complement kebeles.

There is need to attract foreign investors to participate on agricultural production and marketing, according to the strategy. This will enable us to benefit from their advantages related to market access, agronomic knowledge and capital. Their resource and knowledge can be effectively used in high potential areas with extensive ideal land to produce crops. Even in other areas their expertise and resource can be used in production and export of horticulture and flowers, too. Although domestic investor can possibly participate in these areas, they are in comparative disadvantage compared to foreign investors. Furthermore, special training of workers of the private sector and direct extension of training given to farmers could also help the efficiency of the private sector and direct extension of training given to farmers could also help the efficiency of the private sector. Moreover, the trains must be able to establish their own enterprises. To do so that they will need have access of finance, land and entrepreneur skill.

 Moreover, vertical coordination of farming and marketing by using contract farming can improve the market failure that farmers face in extension, credit, inputs, insurance and output market. And it should be done with clear contractual agreement between both parties. “Even though the relationship is only between the two independent parties, that is the farmer and the investor, the government can play a major role in a way that will not violet the major principle. It can and should make the two parties meet by looking for interested investors and coordinating farmers. It can advise to make the contract keeps the benefits of both; it can prepare model contact for this purpose. It must clarify for both parties the obligation of each one of them has according to the contract and strengthen their readiness to implement the contract. If any one of the parties proves to be a defaulter, it must make legal measures to be taken quickly. It must also make them have prior understanding on this”.

**Reflection:**

The two important issues that need to be assessed are that the use of social capital and role of NGO. Social capital and its importance for coordinating development are appreciated on pastoral areas only. But we can’t assume that social is to be found in pastoral areas only as there is large number of social capital that can be used for development purpose on other areas, too. The second problem is related to role of NGO and general civic society which is defined as additional source of finance and safety net for the kebeles (their administrates). After kebele’s made the decision of what to do civic society are supposed to help them on areas which the kebeles are lacking capacity. This is like wasting a valuable resource, when you made value oriented, professionals and flexible workers under kebele officials, which are simply no more than lower level politicians! But we know that all civic societies are not efficient compared to state. When you think about value orientation in dynamic sense it is highly possible wage oriented individuals society performance could be needed if necessary but can’t define all civic society to be inefficient and put them in secondary role after kebeles.