



IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Volume: 9 Issue: VI Month of publication: June 2021

DOI: https://doi.org/10.22214/ijraset.2021.35520

www.ijraset.com

Call: 🕥 08813907089 🔰 E-mail ID: ijraset@gmail.com

Ways to Improve the Organizational and Economic Framework for the Use of Marketing in Agriculture in the Context of Modernization of the Economy

Shafiq Rahman Hotak, i.f.n Ro'ziev O

Abstract: After 20 years of neglect by international patrons, agriculture is now again in the headlines because high food prices are increasing food anxiety and poverty. In the coming years, it will be important to increase food productivity and production in developing countries, expressly in Sub-Saharan Africa and South Asian countries like Afghanistan with smallholders. This, however, wants finding viable solutions to a number of complex procedural, institutional, and policy issues, including land markets, research on seeds and inputs, agricultural extension, credit, rural organization, connection to markets, rural non-farm employment, trade policy and food price stabilization. This paper reviews what the economic poetry has to say on these topics. It debates in turn the role played by agriculture in the development course and the interactions between agriculture and other economic sectors, the determinants of the Green Revolt and the foundations of agricultural growth, issues of income diversification by farmers, approaches to rural growth, and issues of international trade policy and food security, which have been at the root of the crisis in agricultural commodity instability in recent years.

I. INTRODUCTION

The agricultural sector continues to play a crucial role for development, especially in low-income realms where the sector is large both in terms of aggregate income and total labor force. Having been a key anxiety of developing country governments, patrons and the international community during the 1960s and 1970s, agriculture gone from the development agenda in the 1980s and 1990s, only to return in the first decade of the 21st century because of neglect and underinvestment (see Fig. 1). There is renewed interest in the problems of the sector—not to a small extent thanks to the *World Growth Report 2008, Agriculture for Development* (World Bank, 2007) and Agriculture at a Crossroads (IAASTD, 2009), both of which came from total consultative processes of scientists, result makers and donor agencies







International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

Donor countries have swore large sums for investment in agriculture—for example, the G8 states promised \$22 billion during their meeting in Aquila, Italy in 2009. These pledges were made in the aftermath of three real-time global crises—food crisis, climate crisis, and financial crisis— and their aftermath. Food prices have sharp twice in a period of 4 years: the United Nations Food and Agriculture Organization (FAO) food price index thin in June 2008, then hit another record high in March 2011. Dearth, fires, and monsoon floods have destroyed harvests in many countries from Russia to Pakistan. In poor countries, this has led to hunger, falling food insecurity, and vulnerability to poverty.

There are two challenges connected to agriculture. The first is the need to increase food productivity and production in emergent countries, especially in Sub-Saharan Africa and with smallholder growers. To achieve this, a number of problems need to be addressed: property rights, R&D for seeds and inputs, irrigation, fertilizer, agricultural delay, credit, rural infrastructure, storage, and connection to markets.

The second problem is the instability of food prices, often because of events outside the control of poor countries. An interconnected grouping of steps could help ensure that the most weak countries and people get the nutrition they need.¹_The modest desire of this paper is to review the economic literature on agriculture, focusing on the issues that are critical for agricultural efficiency and poverty reduction. (Jean-Jacques Dethier a, 2012)

Over the past period, radical basic changes have been occurred as a result of economic reforms in agriculture. In exact, a comprehensive legal framework has been created for economic reform; ownership is formed and the matching forms of economic supervision of agricultural production are created, optimal conditions are created for the functioning of farms and dekhan farms as a capable form of economic title in the industry; improved attitude to the ownership and use of land as the main production tool of agriculture; an autonomous agrarian policy has been developed and is being steadily implemented, which provides regular supply of the population with their own food products; market values are effectively used in the production, processing, sale and checking of products. With the aim of organizing diversification of production, taming land and water relations, creating favorable conditions for agribusiness and the high value chain, subsidiary the development of cooperative relations, general introduction of market mechanisms, information and communication technologies in

the industry, as well as the real use of scientific achievements on October 23, 2019 The President of the Republic of Uzbekistan signed the Decree "On support of the Strategy for the Progress of Agriculture of the Republic of Uzbekistan for 2020–2030"[1]. The following areas were known as priority areas for the implementation of the strategy: progress and implementation of the state policy on food security, which provides for food safety and improving the diet, the making of food products in the mandatory quantity; creating a favorable agribusiness climate and added value chain, providing for the prevalent introduction of market principles in the purchase and sale of agricultural products, the progress of a quality control infrastructure, the elevation of exports, and the production of high value-added agri-food products viable in the target international markets; the introduction of mechanisms to reduce the role of the management and increase the investment attractiveness of the industry, providing for an rise in the flow of private speculation capital to modernize, diversify and support the stable growth of the agri-food sector; improving the system for confirming the rational use of natural resources and conservation protection, providing for the rational use of land and water resources, forest resources; the development of modern organization systems, providing for the reform and further development of the structure of public management in agriculture; (S.Mekhmonov1*, 2019)

A. Research Problem

How can developing countries grow their economic on the basis of their agriculture production ?

- B. My Hypothesis
- 1) Developing countries needs economic standards on agriculture sector
- 2) Agriculture is the main source of income in developing countries

C. Methodology used in the Research

The method of my research is qualitative research.

Qualitative method is pigeonholed by the fact that one wants to understand people and how they experience their reality, it involves fieldwork, description and discovering the meaning of the hypothesis, where the researcher plays an important role in collecting data. The data can be retrieved from interviews and observations ,articles ,books and websites where generalization is made by comparing individuals.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

HOW CAN THE NEW INSTITUTIONAL ECONOMICS FRAMEWORK BE APPLIED TO AGRICULTURAL POLICY RESEARCH IN DEVELOPING COUNTRIES?

In order to start the debate on the bearing of the New Institutional Economics for agricultural policy research in developing countries it is fitting to refer the following paragraph from North (2000):

"The cost of performing, to put it in it bluntest form, is the key to economic performance. When I go to third world nations and look at why they perform badly and observe how factor and product markets are really working, in every case, be it capital, labor or product markets, one perceives that the cost of transacting is high. The cost of handling results in the economy performing badly because it is so costly for human beings to interact and engage in several kinds of economic activity that the result is

poor act and poverty and so on. Where this takes us, of course, is to try to understand why the cost of handling is so high..."

Since institutions and the formal framework provide the incentives for efficient production and for people to engage in economic activity, an organized analysis is required to explain why the cost of performing is so high in developing countries. The frequent existence of market failure and incomplete markets (because of higher transaction costs and information asymmetries) in rising countries cannot be explained by orthodox neo-classical economics and requires an institutional analysis. Many of the institutes or formal rules of behaviour that are taken for granted in developed countries and that facilitate market argument are absent in lowincome countries. Therefore, the NIE is a useful outline that could help determine the types of bodies needed (either formal or informal) to improve economic performance in developing countries.

The NIE framework has formerly been used by a number of authors (see for sample Binswanger & Rosensweig, 1986; Binswanger & McIntire, 1987; Stiglitz, 1974; Hayami & Otsuka, 1993) in applications to the problems of emergent nation agriculture. Dorward et al, (1998) offer a detailed review of these applications. These studies are amid a large body of literature that applies aspects of the NIE framework – mainly the cost of data and the lack of property rights – to explain market bombs in the main intertemporal markets (insurance, credit, futures markets) and the labour market. Some authors also illustrate how foundations such as sharecropping and other forms of interlaced contracts emerge to overcome market failures. Also in South Africa we have previously seen a number of applications of this framework.

In addition to the many requests of the NIE framework to input market failures it can now also be said that the rapid changes in the food and agricultural sector in developing nations in the aftermath of market liberalization and government devolution offers an additional and probably much more fertile terrain for the application of the NIE framework. This is showed in the next section.

A. The Challenges facing Agriculture in Developing Countries

The trend of market-oriented reforms following joint trade liberalization and especially structural tuning programs in developing countries has led to the increased mixing of world markets (Reardon & Barrett, 2000). This has meant that farmers in the developing world are now more than ever linked to patrons and corporations of the rich nations. Although most of the changes in agricultural and food markets are taking place in settled countries, they have far feat implications for agricultural development efforts in developing countries.

The increased developed nature of agriculture in developed as well as developing countries is largely the result of biological and data technologies (Schrader, 1986), economic growth, mechanization, the swelling scale of organization and the modernization of production, processing and supply systems (Sofranko et al, 2000). Drabenstott (1995:14) argues that there are two controlling forces driving this process of progress: a new consumer and a new producer. The new consumer is a highly demanding sort and the new producer is prepared with new technology and managing tools that enable him to engineer food from farm to table. This sounds like an ideal situation, but outmoded markets do not handle these circumstances well.

The new lifestyles of consumers in the affluent countries of the north, shifting demographics, as well as a growing indebtedness for the link between diet and health, has paid to different eating patterns and has influenced the food purchases of consumers in these countries. Consumers today are hard much more than choice – they also want quality, reliability and value. Much of agriculture has therefore to shift from a philosophy of "here's what we produce" to a location where farmers take note of what the buyer wants. New technology now makes it possible to ensure that agricultural and food products do have the features consumers want (Drabenstott, 1995; Boehlje, 2000). This technology contains biotechnology and information technology.

Added to this is the fear about food safety and the recent range of food scares. Food safety issues are more likely to be a worry in the case of fresh food products, which include fresh meat, seafood, spuds and fruits, and which account for half of the value of total food and agricultural transfers from developing countries (Unnevehr, 2000). The need to control for high perishability and safe conduct requires specialized production, filling techniques and refrigerated transport. These require large capital reserves and also involve investment in research, development, and marketing, which small and medium originalities cannot easily afford.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

Apart from the gravities from consumers and end-use markets, other major drivers and contributors to these changes in agriculture include, growing competition from global market applicants, economies of size and scope in production and distribution, risk mitigation and managing strategies of buyers and suppliers, strategic positioning and market power/control strategies of different business. These variations in food and agricultural markets have introduced different forms of vertical integration and alliances, which are now gradually dominating the agricultural market chain. The need for increased direction can also be attributed to the failure of outdated (spot) agricultural markets to deal with this new scenario. Usually, bulk commodities flow through product markets to food processors who in turn market uniform products to consumers. Consumers now demand tailored foods and to ensure that they get them, food firms want more specific farm products. In addition, food safety concerns has brought increased study and regulation in developed nations. As a result processors/marketers have avoided traditional spot markets and have engaged in more direct market stations such as market and making contracts, full ownership or vertical integration.

In this context a fresh tactic to market access, namely that of economic actors engaging in transactions rather than a large number of atomistic firms creating a 'market' is imperative to gaining an considerate of market access for small-scale farmers in evolving countries. It is often only the well endowed and skilled that has the ability to be part of these marketing chains and unions. There is therefore a danger that the foods, quality standards, and food safety rules of the consumers and corporations (supermarkets) in the settled countries, can act as effective barriers to sharing in the high value chains by small exporters and to some extent, small producers. Or as Boehlje & Doering (2000:53) argues – smaller operations not associated with an industrialized system will have growing difficulty gaining the economies of size and the access to technology mandatory to be competitive. For a small number of farmers in rising countries who have the ability and bonus to be part of these rewarding markets, however, the reward could be substantial.

While there are serious fears about their ability to survive in the medium term under these changing environments, there are options for smaller firms and farms to still play a role. This role could relate to product variation linked to products from region of origin, or living products and other niche markets. The major route for continued survival will however be through misusing other factors. One such a factor is a reliance on peripheral rather than internal economies of scale through networking/clustering and other forms of coordination and alliances. This could be amongst small firms or through creating links between small firms/growers and larger enterprises who have already overcome the major walls to market entry. It is in this context that the NIE can inform commerce and policy makers on the most appropriate organizational form.

Against the related of deregulation and as the vertical directing characteristics of global agricultural progress increases, there is a need for more specific analytical techniques for contract evaluation using the business cost economics paradigm (Cook & Chaddad, 2000). This would require the checkup of alternative "institutional arrangements" which could minimize contract costs.

B. Transaction cost Economics in Agricultural Policy Research

Transaction cost economics is mainly relevant for agricultural market analysis in developing states and the changes in the agricultural sector in general. As the agricultural sector becomes a more globalised and relaxed industry, the transaction becomes the unit of scrutiny. This implies that transaction costs economics can potentially offer useful insights to agricultural policy exploration in these countries. In the context of the larger need for coordination, the role of transaction costs, trust and affairs, formal and informal contracts, vertical linkages, information asymmetries, and strategic agreements will become very important. Especially important will be to analyse the organized response at the farm level to this globalisation. How can we include small ranchers in export markets? Here we need to know the role of contracts and how they emerge. The business costs framework can contribute in elucidation the choice of contracts among farmers and traders, and local traders and multinationals.

The deal cost economics approach, focuses on how the characteristics of a transaction affect the costs of handling it through markets, organizations, and other forms of organization. Williamson finds the critical dimensions of characterizing a matter and links these to the institutional governance building of transactions. The principal dimensions describing a transaction are indecision, frequency of exchange, and the mark to which investment are transaction-specific. Transaction costs include the costs of gathering and dispensation the information needed to carry out a transaction, of success decisions, of negotiating contracts, and of policing and imposing those contracts. All transaction costs derive from a combination of bounded wisdom (which reflects both imperfect information and a limited capacity to analyse it) and cunning, which Williamson (1996) defines as "selfinterest seeking with guile". Given defective information about the future, all contracts are inevitably incomplete. If people were never opportunistic, however, incomplete contracts would not lead to contract execution problems; contracts would simply state that if startling contingencies arose, the parties would act in a manner acceptable to all.



International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429

Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

There have been a number of fairly recent submissions of transactions cost economics in unlike fields of the food and agricultural sector. Examples of these lessons are Staal et al (1997), Frank & Henderson (1992), Key, Sadoulet & de Janvry (2000), Hobbs (1997) and Loader (1997). Very few empirical studies have actually leisurely transaction costs to-date, probably due to the difficulties associated with their measurement. Business costs may be so high relative to the benefits of the contract that the exchange does not occur, in which case the transaction costs are unobservable (Staal et al, 1997). The offered studies have inclined to focus on distance to market as a single indicator of transaction costs (Omamo, 1998; Oruko, 1999). One of the first studies to carry out pragmatic extent of transaction costs was the innovative approach by Hobbs (1997). A number of lessons in Africa and also in South Africa have employed a variety of skills to measure transaction costs in small-scale farming systems (cf. Makhura, 2001; Staal et al, 1997; Matungul, Lyne & Ortmann, 2001; Ngigi, 2002; De Bruyn et al, 2001). (Kirsten, 2010)

A. Modernization Theory And Study Of Development

It has turned usually listless areas of the world into seething cauldrons of change. On the whole it has not been a very pacific process . Given the certain connection between economic torpor and the incidence of violence, the years that lie ahead for the nations in the southern half of the globe are gravid with violence. This would be true even if no threat of Marxist subversion existed—as it clearly does.... Whether Marxists are involved or not, violence anywhere in a taut world transmits sharp signals through the complex ganglia of universal relations; and the security of the United States is related to the security and stability of nations half a globe away.*

When it converted clear, in the early 1950s, that the development of poor countries demanded a special attention from social science, the failure of economic theory to meet this claim by itself was soon appreciated:

its neglect of nation, of disciplines such as history, sociology and anthropology, meant that it never produced a system of economic development and of industrialization. Naturally the theories set forth tended to have some advisory power for Western progress, because it was the historical and sociological factors in that process which were the premises for model edifice. It was only when these theories were applied external of the Western nationals that their premises became painfully obvious (Weinberg, 1969, p. 3).

The sharing of other social science disciplines in the discussion of development was recognized as necessary, often being expressed in the 'social settings of economic growth' or 'non-economic blockades to economic growth' types of formula. The extent of prolific interdisciplinary activity in the resulting field of growth studies is hesitant, but the contributions of social psychologists, historians, anthropologists and dogmatic scientists, as well as economists and sociologists, did ensure an rarely useful eclecticism.3 A decisive landmark in terms of a more systematic academic approach within sociology proper was Daniel Lemer's The Passing of Traditional Society, printed in 1958, of which Bendix has observed: 'The great merit of Lemer's study involves in its candid use of Western upgrading as a model of total applicability' (Bendix, 1967a, p. 309). It will be argued that this aspect of reconstruction theories is inextricably involved in practice with the other features indicated above. Within the straight area of discourse of sociology certain criticisms of the 'grand theory* approach to advance have been advanced, some of which are referred to in the framework of the broader critique struggled here. (Bernstein, 2007)

B. Agriculture in Afghanistan

Agriculture dominates the Afghan economy, causative an estimated 53% of gross domestic project and providing pay and livelihoods for about 80% of the people. However, 25 years of war and civil fight and the recent severe prolonged drought have seriously affected Afghanistan's agriculture sector. Evolving the agriculture sector is critical for economic evolution and for tackling opium poppy cultivation.

The Government of Afghanistan distinguishes that economic growth is a key factor for poverty drop and that agriculture plays an important role in this process. Given the country's want on agriculture, the rate of recovery in the sector will largely determine the nation's overall rate of economic salvage and poverty reduction. Higher rates of growth in agricultural efficiency are necessary to promote broad-based economic progress, reduce rural poverty, and conserve natural resources. Agricultural productivity growth is based largely on request of science, technology, and data, and needs to be provided through national agricultural exploration and extension systems. However, as Afghanistan moves forward on developing agricultural research and leeway systems it can no longer rely on just out-of-date government systems, but must include all organizations and institutions that generate, share, import, and use agricultural data and information.

Prior to 1979, Afghanistan's agriculture research system covered 24 research stations, over 1,000 staff, 25 percent of which was nominal research staff. However, this system is now mostly dysfunctional as a result of widespread degradation of structure and human capital.



International Journal for Research in Applied Science & Engineering Technology (IJRASET) ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

The agricultural extension system, which used to operate during the country with over 400 extension units, is in a similar state of disarray. Of 371 districts general, only 136 have functioning leeway units now. Even these 136 units need major renovations, as well as training for staff. Most staff currently on the payroll have little contact to modern agricultural running practices. Capacity building needs to focus on updating technical skills, and developing new times related to management, monitoring and evaluation, sharing approaches, and modern agribusiness. (Miller, 2006)

III. THE ROLE OF AGRICULTURE IN DEVELOPMENT

A. Agriculture, Growth, and Poverty Reduction

Developing economies have commonly been described as dual economies with a traditional agricultural sector and a modern industrial sector.⁴_Productivity is presumed to be lower in agriculture than in the modern sector. The canonical model was put forward by Lewis (1954) and next extended by Ranis and Fei (1961). Lewis' model rests on the idea of extra labor in the agricultural sector. With lower efficiency in agriculture, wages will be higher in the modern sector, which makes labor to move from agriculture to the modern sector, which in turn generates economic growth. Other ancestors, such as Schultz (1964), also point out the standing of food supply by the agricultural sector. In Schultz's view, agriculture is important for economic progress in the sense that it guarantees subsistence for culture, without which growth is not possible. This early view on the role of agriculture in economic coordinated Kuznets' (1966) empirical observation that the standing of the agricultural sector declines with economic development. In this view, the role of agriculture in economic progress is to supply cheap food and low wage labor to the recent sector. Otherwise, both sectors have few interconnections. Progress and higher productivity in the agricultural sector can underwrite to overall economic growth by releasing labor as well as capital to other sectors in the economy. However, progress is seen as the ultimate driving force behind a country's advance and agriculture as a traditional low-productivity sector.

rural poverty. In urban nations, by contrast, agriculture plays the same character as other tradable sectors and subsectors with a comparative advantage and can help to produce economic growth.

So far our argument has mostly considered theoretical models. We now turn to empirical investigations of the relation among the agricultural sector and economic growth. Early contributions by Kuznets, Chenery, and others focused on sector changes additional economic development. <u>Kuznets (1966)</u> observed that as economies develop, the share of agriculture in output and employ diminishes, which later observed data have reconfirmed. Other important early contributions include <u>Chenery and Syrquin (1975)</u>, who shared cross-section and time-series data over 1950–1970.

Timmer (2002) uses a panel of 65 evolving countries over 1960–1985 to show a positive correlation among growth in agricultural GDP and its padded values and nonagricultural GDP growth. He proposes that this correlation can be described by "first-order" things of agricultural growth on lower food prices, labor exodus, and capital flows from agriculture, as well as "second- order" things, such as improved nutritive intake, which improves workers' productivity. Equally, <u>Self and Grabowski (2007)</u> establish a positive relation between different measures of agricultural output and average growth of real GDP per capita over 1960–1995 for a cross-section of realms. However, on the basis of panel data from 52 developing countries during 1980–2001, <u>Gardner (2005)</u> settles that agriculture does not seem to be a chief force behind growth in national GDP per capita.

Recent empirical fiction considers that the effect of agricultural progress on poverty easing is highly positive. <u>Mellor (2001)</u> argues that it is not economic growth in general that reduces poverty in developing countries, but the direct and indirect effects of evolution in agriculture. In their study of poverty in India over a 35-year period, <u>Datt and Ravallion (1996, 1998)</u> find that higher farm production reduces both unqualified as well as relative poverty. This is partly due to a direct channel of higher family income operating in the short run and partly due to indirect channels, such as higher wages and lower food prices, in the lengthier run. Other empirical lessons also suggest that these are the main channels and not labor relocation from agriculture into other sectors. This strengthens the argument for secondary agricultural growth.⁵ Similarly, Loayza and Raddatz (2010) show for a cross- section of developing countries that growing in more labor-intensive parts, such as agriculture, has a larger impact on poverty drop than less labor-intensive activities

B. Agriculture and Urban Bias

Perhaps the agricultural sector's most important contribution to development in poor countries in the past has been to offer savings, i.e., surplus—extracted through various means—over and above what was vital for the reproduction of agricultural creators, which allowed industrialization to take place. The literature has extensively discussed the tax and price policies that are needed to bring about leftover extraction (see <u>Sah and Stiglitz</u>, 1984; Carter, 1986).



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

These policies became famous by the negotiations between Preobazhensky and Bukharin about the so-called "primitive" forms of socialist accrual in the Soviet Union where farmers faced artificially low prices for their output and penal taxation throughout the 1920s and 1930s (Conquest, 1987). Unfailing with these early models of agriculture as spawning a surplus that could be extracted for the benefit of industry, in the recent past, governments in emergent countries have imposed a heavy problem on agriculture by implementing urban-biased policies. Krueger et al. (1991) multi-country study provides experimental support for the view that price policy, trade plan, and exchange rate policy in virtually all developing countries have discriminated against agriculture. The insight has been direct, through food appropriations or taxes on agricultural exports, or indirect, through manufacturing protection and talk rate overvaluation. During 1960–1984, these policies mined an average of 46 percent of agricultural GDP from the sector in 18 developing countries (Krueger et al., 1991). This gigantic study confirmed the hypothesis of Schultz (1964), who argued that farmers in poor countries are not recessive and "traditional", but, on the contrary, rational decision makers who maximize the returns from their resources. Their seeming unwillingness to innovate, he said, was rational because governments of developing countries often set artificially low prices on their crops and taxed them seriously. In other words, peasants answer to incentive

IV. THE FOUNDATIONS OF AGRICULTURAL GROWTH

This section looks at the recital of the agricultural sector in different regions of the world, the foundations of agricultural evolution, and the challenges faced by farmers in developing countries that might weaken the returns to agricultural technologies. These include the structure of agricultural making, environmental factors, and barriers to technology espousal.

A. Green Revolution and Technology Adoption

The Green Mutiny, meaning the adoption of high-yielding varieties, was largely made possible by investments in enricher and irrigation. The massive use of fertilizers—without the help of which high-yielding assortments cannot grow successfully—changed agricultural applies forever thanks to which water can be kept and sent to dry areas, putting more land into agricultural production— also enlarged production. The Green Revolution exponentially increased the amount of food construction worldwide and sharply reduced the frequency of famine, especially in Asia. There have been major downsides, however. First, since only a few classes of high-yield varieties of rice or wheat were grown-up, tens (if not hundreds) of thousands of seed varieties that existed prior to the Green Revolution are no lengthier being used. Increased crop equality implies that seeds are more prone to disease and pests because there are not enough variations to fight them. In order to protect these few varieties, pesticide use grew, with major negative ecological externalities. Second, at least if one adopts a Malthusian view of growth, the increased amount of food production available worldwide has been an vital cause of overpopulation.

Between 1980 and 2004, the agricultural sector raised at an average rate of 2.6 percentage worldwide, with two-thirds of this growth contributed by Asian economies. Agricultural yields in Asia enlarged at an average rate of 2.8 percent between 1961 and 2004.

Ruttan find that, in labor-abundant but land-scarce Japan, technology has been technological change in Japanese and U.S. agriculture, for occurrence, Hayami and mainly land-saving, allowing for a rapid growth in the productivity of land. In the mainly labor-saving, allowing rapid growths in the productivity of labor.

B. Agricultural Investment and Appropriate Technologies

Identifying the features of agriculture in Africa does not explain why yields are low. There are two broad problems. The first is lack of fitting technology and the second is lack of espousal. Whereas the former calls for better targeting of research to African

countries and their conditions, the latter stresses a reduction in the barriers to technology agreement. Of course, the problem of low yields may also be a combination of both inappropriate technology and blocks to adoption.

Agricultural R&D and its capacity to food more productive technologies are at the heart of long- run agricultural growth.⁹ Such new technologies started the Green Uprising in Asia, and in light of the limited potential for land expansion in Sub-Saharan Africa such inventions are also sturdily needed for African farmers. Due to the heterogeneity of the realms and differences with, say, Asian countries, crops that have been planted in other provinces might not be appropriate for Africa. Technological spillovers from high-income states to low-income African countries are unlikely. Moreover, regional changes are large within the continent and prevent technology spillovers among African countries (Pardey et al., 2007; Binswanger-Mkhize and McCalla, 2010).

At the regional level, new institutions have been advanced, such as national agricultural study systems (NARS) and the New Partnership for Africa's Development (NEPAD). NEPAD, for sample, has set a target of 6 percent agricultural growth in order to cheer public spending in this sector. Similarly today, bomb of agriculture and economic growth in Africa is at the core of the refugee crisis, what I term "agricultural-economic bomb refugees" afflicting Europe. Suit it to say, today's industrialized countries have without exception, developed agriculture.



ISSN: 2321-9653; IC Value: 45.98; SJ Impact Factor: 7.429 Volume 9 Issue VI Jun 2021- Available at www.ijraset.com

Even the world's only super power made its economic might round agriculture, by way of land-grant colleges that delivered efficient and effective integrated research, extension and drill services. And, because of the position of agriculture in America, farmers constitute only about 2% of America's population, and yet, they are a most powerful trade lobbying group that makes the short-lived of the Land-Bill a non-negotiable, non-partisan part of US politics. If the most radical and most developed country on Earth, values its agriculture and attendant agro-processing trades so much, why not Africa, where more than 75% of its populace lives from agriculture? (Kadzere, 2016)

United States, where land was rich and labor scarce, technology has been

An effective agriculture delay system will need to provide a broad range of services (advisory, technology transfer, training, and data) on a wide variety of actions (agriculture, marketing and social group) needed by rural people in Afghanistan so that they can better manage their agricultural organizations and livelihoods. Future funds in agriculture development will also require more sustainable formal arrangements for providing knowledge and information services to Afghan farmers. For this to happen, both the public and isolated sectors will need to assume new roles and responsibilities.

The new concepts labelled above provide valuable insights for policymakers in Afghanistan as the country moves forward with evolving a modern, market-led agriculture sector. Like other emergent countries, Afghanistan needs to modernize its agricultural economy, creation the best use of new ideas, new technologies, and new information. Growth in agricultural output, which will drive overall economic growth, must be based on new requests of science, technology, and information. Adoption of some of the latest theoretical ideas on transforming agricultural data systems, along with enabling policies, will provide a more fertile environment for largescale funds in agriculture that are needed to rebuild the agriculture sector

V. CONCLUSION

An effective agriculture extension system will need to provide a broad range of services (advisory, technology transfer, training, and information) on a wide variety of actions (agriculture, marketing and social organization) needed by rural people in Afghanistan so that they can better manage their agricultural systems and livelihoods. Future investments in agriculture development will also require more sustainable institutional arrangements for providing knowledge and information services to Afghan farmers. For this to happen, both the public and private sectors will need to assume new roles and responsibilities.

The new concepts described above provide valuable insights for policymakers in Afghanistan as the country moves forward with developing a modern, market-led agriculture sector. Like other developing countries, Afghanistan needs to modernize its agricultural economy, making the best use of new ideas, new technologies, and new information. Growth in agricultural productivity, which will drive overall economic growth, must be based on new applications of science, technology, and information. Adoption of some of the latest conceptual ideas on transforming agricultural knowledge systems, along with enabling policies, will provide a more fertile environment for largescale investments in agriculture that are needed to rebuild the agriculture sector.

As we studied the agriculture is one of the main and fundamental source of income in developing countries, and for this reason these countries needs to pay attention in this sector more than any other, the world is surrounded by technology and in every sector can feel its impacts so in agriculture is also one of them, technology makes getting work done fast and easy and the result of the work will be many more than without technology, in developing countries as we mentioned agriculture is the main income so they need to make their activities and agriculture with standard of the new technology

REFERENCES

- [1] Bernstein, H. (2007). Modernization theory and the sociological study of developmen. The Journal of Development Studies, 142-143.
- [2] Jean-Jacques Dethier a, A. E. (2012). Agriculture and development: A brief review of the literature. Economic Systems, 2-3.
- Kadzere. (2016). The crucial role of agricultural development in economic growth and industrialization of Africa and the call for integrated services delivery. Dohne Agricultural Development Institute, 179-180.
- [4] Kirsten, M. K. (2010). THE NEW INSTITUTIONAL ECONOMICS: APPLICATIONS FOR AGRICULTURAL POLICY RESEARCH IN DEVELOPING COUNTRIES. Agrekon: Agricultural Economics Research, Policy and Practice in Southern Africa, 3-5.
- [5] Miller, D. (2006). BUILDING A NEW AGRICULTURAL RESEARCH AND EXTENSION SYSTEM IN AFGHANISTAN: INITIAL THOUGHTS. Kabul: USAID.
- [6] S.Mekhmonov1*, E. E. (2019). The Ways to Ensure the Financial Stability of Agriculture under Conditions of Modernization of the Econom. Open Journal of Economics and Commerce, 1.











45.98



IMPACT FACTOR: 7.129







INTERNATIONAL JOURNAL FOR RESEARCH

IN APPLIED SCIENCE & ENGINEERING TECHNOLOGY

Call : 08813907089 🕓 (24*7 Support on Whatsapp)