

# A Study of New Trends in Agriculture Production and Family Farming

Udit Rana

M.A (Geography), MDU, Rohtak (Haryana)

---

## ARTICLE DETAILS

### Article History

Published Online: 10 November 2018

### Keywords

Trends, Agriculture Production, Family Farming

---

---

## ABSTRACT

India's achievements in agriculture sector, though impressive in some areas and states, have remained lower than the potential. The main reason for this is the complacency of our leaders, particularly research leaders, with our achievements. We generally compare our contemporary food situation with the situation of food scarcity of mid 1960s and draw satisfaction from the fact that now we are not facing food scarcity. Our mindset is fixed in comparing agriculture of 2000s or recent years with agriculture of 1965-67 rather than comparing agriculture achievements with the achievements of India's other sectors and other nations. What has been achieved in agriculture is not compared with what is achieved in space, IT, telecom, services, automobiles, medical science, transport etc. Between 1965-67 and 2000s, we are much more different in all sectors and spheres of life than in agriculture but we do not assess achievement of agriculture against the challenging yardsticks. Surely, agricultural achievements are big compared to mid 1960s but they look dwarf compared to other yardsticks.

---

## 1. Introduction

Transformation of agriculture sector is crucial as 44.2 per cent workforce in the country is employed in agriculture and thus depends on agriculture for their livelihood. There is large gap between income of agriculture workers and non agriculture workers. Poverty and under nutrition in the country are concentrated among agricultural labour and small and marginal farmers. There is lot of concern relating to rural distress. If current trends in agriculture are not changed there will be little improvement in reducing income gap between agriculture and non agriculture income and alleviating rural distress.

Over the past century, enormous progress has been achieved worldwide in improving human welfare. Societies have changed radically thanks to quantum leaps in technology, rapid urbanization, and innovations in production systems. Yet conditions in today's world are a far cry from the world 'free of fear and want' envisioned at the foundation of the United Nations. Similarly, much remains to be done to fulfil the vision of the Food and Agriculture Organization of the United Nations (FAO): to create 'a world free of hunger and malnutrition and one in which food and agriculture contribute to improving the living standards of all, especially the poorest, in an economically, socially and environmentally sustainable manner'. Amid great plenty, billions of people still face pervasive poverty, gross inequalities, joblessness, environmental degradation, disease and deprivation. Displacement and migratory flows are at their highest levels since the Second World War. Many armed conflicts have been resolved, but new ones have emerged. Much of humanity's progress has come at a considerable cost to the environment. The impacts of climate change are already being felt, and – if left unabated – will intensify considerably in the years ahead. Globally integrated production processes have brought many benefits, but present challenges in terms of their regulation and the need to steer them towards more equitable and sustainable outcomes. Population dynamics will radically change demographics over the coming decades and towards the end

of the century. Projected growth in the world's population is expected to be concentrated in Africa and South Asia and in the world's cities. By mid-century, two-thirds of the global population will live in urban areas. Low-income countries will see large increments in the 15-24 years age group. The population will continue to grow in South Asia until mid-century and in sub-Saharan Africa until at least the end of the century. By the year 2100, Asia and Africa are expected to be home to a combined population of 9 billion, out of the projected 11 billion people who will inhabit Earth.

Population growth could provide these regions with a huge demographic dividend and massive growth in domestic markets. However, cashing in on this dividend will be challenging. Unless adequate economic opportunities are created, the boon may well turn out to be a bane, one that fuels mass migration and, possibly, conflicts. Other regions, meanwhile, will have to adjust to rapidly ageing populations. The changing demographics will further increase the weight of low- and middle-income countries in the global economy. However, this does not necessarily mean incomes will converge among nations and individuals. In recent decades, rapid growth in emerging economies has contributed to some decline in levels of inequality among countries. But this has been offset, by and large, by rising inequality within most countries, whatever their income level. Despite significant economic growth since 2000, the average income of people living in Africa is about 5 percent of the average income of citizens living in the United States. This proportion is less than what it was half a century ago. This reveals not only deep imbalances in current levels of well-being but also the huge disparities in the capacity to save and invest in future income generation. While the full implications of this situation for future trends are hard to predict, it is likely that vast global inequalities will persist for some time to come, even if low-income countries do manage to benefit from their demographic dividend.

## 2. Agriculture Production and Family Farming

Agriculture Production and Family farming is one of those phenomena that Western societies find increasingly difficult to understand. This is due to many reasons. One of these is that family farming is at odds with the bureaucratic logic, formalised protocols and industrial rationale that increasingly dominate our societies. This makes family farming into something that is seen, on the one hand, as both archaic and anarchic, whilst at the same time it emerges as something attractive and seductive. Family farming is also difficult to grasp and understand because it is, essentially, a complex, multi-layered and multi-dimensional phenomenon. Below, I identify ten qualities of family farming. These qualities are not always present at the same time in each singular situation. The most important thing to remember is that the reality of family farms is far richer than the two single aspects that are most commonly used to describe them: that the farm is owned by the family and that the work is done by the family members. Family farming is not just about the size of the farm, as when we talk about small scale farming, it is more about the way people farm and lives. This is why family farming is a way of life.

Family farmers use these resources not to make a profit, but to make a living; to acquire an income that provides them with a decent life and, if possible, allows for investments in order to develop the farm further. This applies even if the farm uses expensive machinery or irrigation systems and terraces that the farmers themselves have constructed.

Then indeed the family farm is the place where the family provides the main part of the labour force. This makes the farm into a place of self-employment and of progress for the family. It is through their dedication, passion and hard work that the farm is developed further and the livelihood of the family is improved.

The farm is to meet the many needs of the family, whilst the family provides the possibilities, the means and also the limits for the farm. This nexus between the family and the farm (3) is at the core of many decisions about the development of the farm. Each particular farm has its own specific balances, for instance between the mouths to be fed and the arms to do the work. These balances tie family and farm together and make each family farm into a unique constellation.

### 3. Linking past, present and future

But there is more than ownership and labor. Family farms provide the farming family with a part (or all) of its income and food. Having control over the quality of self-produced food (and being sure that it is not contaminated) is becoming increasingly important for farmers around the world. However, the family farm is not only a place of production. It is home to the farming family. It is the place they belong to, as much as it is the place that gives them shelter. It is the place where the family lives and where children grow up. The farming family is part of a flow that links past, present and future. This means that every farm has a history, it is full of memories. It also means that parents are working for their children. They want to give the next generation a solid starting point within or outside agriculture. And since the farm is the outcome of the work and dedication of this and previous generations, there often is pride. And anger when others try to damage or even

destroy the jointly constructed farm. The family farm is the place where experience accumulates, learning takes place and knowledge is handed over, in a subtle but strong way, to the next generation. The family farm often is a node in wider networks that make new insights, practices, seeds, etc., circulate.

Family farming carries the promise to create agricultural practices that are highly productive, sustainable, receptive, responsive, innovative and dynamic. Given all these features, family farming may strongly contribute to food security and food sovereignty. In a variety of ways, it can strengthen economic development, creating employment and generating income. It offers large parts of society attractive jobs and may contribute considerably to the emancipation of downtrodden groups in society. Family farming may also consistently contribute to the maintenance of beautiful landscapes and biodiversity.

### 4. Importance of Family Agricultural Farm

- a) It meets up the demand of food and nutrition.
- b) It plays role while guest received in a house.
- c) It creates employment for unemployed family members.
- d) It utilizes properly the leisure period of family members.
- e) It creates opportunity for extra income for a family.
- f) Fertility of agricultural land can be increased by livestock and poultry rearing.
- g) Crop residues and by products can be utilized properly by livestock and poultry rearing.
- h) Bio-gas can be produced by using livestock and poultry faces and this can be used as fuel.
- i) Household agricultural farm with proper planning helps to rise up the national economy.
- j) It improves farmer's livelihood.

### 5. Challenges to Family Farming

- a) **Socio-economic challenges:** Although family farmers produce most of food, they, paradoxically face poverty in developing countries with women farmers facing greater constraints. Rural youth are also highly vulnerable due to a lack of incentives for on-and off-farm employment opportunities.
- b) **Shrinking land holding**, as more than 80 percent of all farms globally are below two hectares therefore unable to reach economy of scale.
- c) **Lack of access to** resources, credit, infrastructure and technology to support the food production and marketing.
- d) **Climate change as the environmental conditions** on which they rely are under threat which necessitates adoption of climate resilient agricultural practices.

### 6. Future Trends of Agriculture

#### Massive growth in food demand

The UK Food and Agriculture Association estimate that the world population will increase 47%, to 8.9 billion, by 2050. That's a potentially huge food marketplace. That fact, more

than anything, spells the reality that the agricultural industry is full of potential opportunity.

### **A continuing ramp-up in efficiency**

Simple fact: global agriculture must double in the next 30 years to sustain this type of population growth. Add this reality check: there is little new arable land in the world. The result is that existing producers will have to continue to focus on smarter, better, more efficient growing in order to meeting demand.

### **Hyper-science**

One of the realities of the infinite idea loop in which we now find ourselves is this while there are 19 million known chemical substances today, the number is constantly doubling every 13 years with some 80 million by 2025, and 5 billion by 2100. Science is evolving at a furious pace, and with science at the root of agriculture, we will continue to see constant, relentless new methods of improving crop and livestock yield.

### **Innovation defines success**

Growers that focus on innovation as a core value will find success; their innovation will focus on the triple-feature need for growth, efficiency and ingestion of new science. It will be by adopting new methodologies, products, partnerships and ideas that they will learn to thrive.

### **Retail and packaging innovation drive agricultural decisions**

Do this stare at a banana. Did you know that Chiquita banana has come up with a special membrane that doubles the shelf-life of the product, doing this regulating the flow of gases through the packaging? Take a look at Nature pops each lollipop is wrapped in fully bio-degradable film made from plant matter, and the bags they come in are made from recycled paper, water-based ink and poly lactic acid made from cornstarch. There's a huge amount of innovation happening with packaging companies and on the store shelf, and all of these trends have a big impact on agriculture.

### **Intelligent packaging moves front and center**

Innovation with packaging will take an even bigger leap in years to come, and will involve hyper connectivity, a trend that will be driven by food safety, tracability, country of origin and nutrition labelling needs. Our lives are soon to be transformed

by packaging that can "connect" to the global data grid that surrounds us; and its' role will have been transformed from being that of a "container of product" to an intelligent technology that will help us with use of the product, or which will help us address safety and tracability issues.

### **The energy opportunity**

Agriculture is set to play a huge role as we wean ourselves away from our dependence on oil and natural gas. The US Department of Energy plans to see alternative fuels provide 5% of the nations energy by 2020, up from 1% today. And it is expected that there will be \$1.2 billion in new income for farmers and rural landowners by getting involved with new energy sources such as wind power. Europe plans to have a market that involves at least 20% usage of bio-fuels by 2020, and Feed & Grain estimates that liquid fuels from agricultural feed could replace 25% to 30% of US petroleum imports by that time.

### **Partnership defines success**

If there is one trend emphasized in every industry involved with, it is that no one individual or organization can know everything there is to know. This trend is also becoming prevalent in agriculture. We will continue to see an increasing number of partnerships between growers and advisers, suppliers, buyers, retailers and just about everyone else, so that they learn to deal with the massive complexities that emerge from rapid change and innovation.

## **7. Conclusion**

Family farming is squeezed and impoverished to the bones. When prices are low, costs are high and volatility excludes any possibility for long term planning, and when access to markets is increasingly blocked and agricultural policies neglect family farmers, and when land and water are increasingly grabbed by large capital groups – yes, in these circumstances we see that it turns out to be impossible for family farmers to render positive contributions to the wider society. This is why we have now ended up in the dramatic situation that land of family farmers is laying idle. Or, to use a macro indicator, that 70% of the poor in this world today, are rural people.

## **References**

1. Charyulu D.Kumara and Subho Biswas(2010),Economics and Efficiency of Organic Farming vis-à-vis Conventional Farming in India, Working Paper No.2010-04-03, IIM Ahmedabad
2. Government of India (2005),Some Aspects of Farming, Situation Assessment Survey of Farmers, 59th Round, Report No 496, Ministry of Statistics and Programme Implementation, Government of India, New Delhi.
3. Government of India (2010), Agricultural Statistics at a Glance 2010, Directorate of Economics and Statistics, Ministry of Agriculture, Govt. of India, New Delhi.
4. Government of Uttar Pradesh (2002), Tenth Five Year Plan, 2002, Planning Department, Lucknow.
5. Government of Uttar Pradesh (2003), Human Development Report 2003, Uttar Pradesh, Planning Department, Lucknow.
6. Government of India (2007a), Agricultural Statistics, 2006-07, Ministry of Agriculture,Department of Agriculture and Cooperation, New Delhi.
7. Government of India (2007b), 'Uttar Pradesh Development Report, Planning Commission,New Delhi.
8. Government of India (2002), National Human Development Report 2001, Planning Commission New Delhi.
9. Greenpeace India Report (2011), "Of Soils, Subsidies and Survival" Greenpeace India Society
10. Chand, R.,S.S. Raju, & L.M. Pandey,(2007) - "Growth crisis in agriculture: Severity and options at national and state levels", Economic and Political Weekly, June 30, 2528-2533.

11. Mishra, S. (2007) - "Risks, Farmers' Suicides and Agrarian Crisis in India: Is There A Way Out?" Indira Gandhi Institute of Development Research Mumbai
12. Patnaik, P (2005) - The Crisis in the Countryside, downloaded from <http://ccc.uchicago.edu/docs/India/patnaik.pdf>, Paper presented in a seminar titled 'India: Implementing Pluralism and Democracy', organized by the department of Philosophy, University of Chicago, Nov 11 to 13.
13. Radhakrishna, R. (ed.) India Development Report 2008, 40-53, Indira Gandhi Institute of Development Research. Oxford University Press, New Delhi.