

# [Present about 99% of the districts have](https://assignbuster.com/present-about-99-of-the-districts-have/)

Present scenario of IT: i. The mobile internet is overtaking the wired internet. ii. Networking is growing at a fantastic speed of 10-15% per month or about 200% a year. iii. Specialists forecast that, in less than 10 years from now, Internet terminals would be as common as telephone instruments but much more useful.

iv. About 99% of the districts have Optical Fiber Network (OFN) providing desired bandwidth for Internet beings with computers such as keyboards, mouse devices, scanners. The advent of touch screen monitors that allow users to give input to computers by touching on the appropriate location of the monitor has made it possible to develop user-friendly interface for farmers which is easy, intuitive, circumvents language barrier and at the same time provides a relaxed environment to the users. Output devices: Monitor screens, printers and plotters, data projectors support high resolution and good quality output. Objectives of IT: i. To put information close to the managers, scientists, teachers, extension workers and farmers. ii. To improve the capacity of researchers, teachers and extension specialists to organize, store retrieve and exchange information.

iii. To evolve mechanism of information sharing. iv. To strengthen national libraries and library’s network through electronic access.

v. To develop database for easy access and data based decision-making. vi. To spread information among the farmers. Unique features of IT: 1. Access to the storehouse of information is easy. 2. Information is available instantaneously 3.

Communication is interactive. 4. Information from any point in the globe is available. 5.

Communication is dynamic and ever growing. The key players for utilization of IT in agriculture: 1. The farmer: the actual person who can directly bring about an improvement in. 2. Efficiency and productivity in agriculture. 3. Various industries that provide inputs to agriculture. 4.

Various industries that deal with agriculture output. 5. Institutions/organizations and NGOs working for the benefit of farmers. 6. Agricultural universities and research centers. 7. Central and State governments. The key players listed here can make a big contribution to the economy with the assistance of IT.

The broad information inputs required by farmers: i. Awareness databases: Those facilities to farmers for proper understanding of implications of the WTO on Indian agriculture ii. Decision support systems: Information that facilitates farmers to make proper SWOT (strengths, weaknesses, opportunities and threats) analysis to take appropriate decisions. i. Information on new opportunities ii.

Monitoring systems for corrective measures How IT helps in agricultural production: (a) As a tool for direct contribution to agricultural productivity. (b) As an indirect tool for empowering farmers to take informed and quality decisions, which will have positive impact on the way agriculture and allied activities are conducted. Information technology helps indirectly in the way of: Precision agriculture Remote sensing Expert systems E-agribusiness IT Centers for agricultural development: Agricultural Technology Information Centres (ATICs) provide Diagnostic services for soil testing, plant and livestock health Supply of research products such as seeds, planting materials, livestock breeds, poultry strains, fish seed, processed products etc., emerging from an institution for testing and adoption by various clientele Dissemination of information through literature, audio-visual aids and electronic media An opportunity to institutions for resource generation through sale of their technologies Support the district level ATMAs (Agricultural Technology Management Agencies) in technology dissemination. Indian Society of Agricultural Information Technology (INSIT) & Mandates: 1. To mobilize farmers, scientists, institutions and organization 2. To encourage teaching, research and extension activities 3.

To provide a forum for information exchange and dissemination 4. To organize training programme Information technology has a major role to play in all facets of Indian agriculture in addition to facilitating farmers in improving the efficiency and productivity of agriculture and allied activities; the potential of information technology lies in bringing about an overall qualitative improvement in life by providing timely and quality information inputs for decision making. It can be argued that the next revolution in urgent need of focus is IT revolution in field of Indian farming.

#### Role of Women in Agriculture:

The women contributing to Agriculture production are usually called as Peasant Women (those who are working in the field) and Farm Women (those who are wives of farmers). The contribution of farm women to increased food production could be seen at terms of influencing farmers to (i) accept and adopt new technology to increase their farm income, (ii) modernise the farm through improved farm machinery, (iii) develop the farm with irrigation facilities, (iv) strength post harvest operations, (v) ensure safe storage of food grains, fruits, vegetables including food processing operations, (vi) timely marketing of produce to fetch attractive prices, (vii) encourage savings for investment on farm development, education of children etc. It is evident that the farm women and peasant women are actively engaged directly/immediately in agriculture development process. The Government has taken up several activities to improve the professional skills and capabilites of these women. With women the introduction of high yielding varieties programme and also technological advances in agriculture the gap between existing and desired skills has become wide. To narrow down the gap Farmers Training and Education Programme was started in 1966-67 under which 188 Farmer Training Centres (FTCs) were established.

A lady demonstrator was appointed in each F. T. C. to take care of the peasant and farm women training and education. A strategy to achieve the overall development of women in rural areas with special reference to women in agriculture include. 1. Formal and informal education of rural girls and women.

2. Training of rural women in farm and home activities. 3. Organisation of Rural Women Mandals, Rural Women Television Forums, Mass Campaigns etc. 4. Utilising interpersonal relations among rural Women to convince and motivate them for adoption of planned change. 5.

Linking the planned development programmes for women with existing institutions viz. 188 Farmers Training Centres, 261 Krishi Vigyan Kendras, National Research Centre on Women in Agriculture etc. 6. Involvement of Women in Rural Institutions and all development programmes. 7. Education of Senior citizens in rural areas about role of Women in Development through film shows, poster, classes, discussions etc. 8. Modernisation of rural Social System through implementation of compulsory education for rural girls and adult education through functional literacy for rural women, intensive mass media facilities etc.

9. Liberalising the social and cultural values imposed on rural women. 10. Integrate the women groups in rural areas and form a network of rural women mandals in the country. 11. Create a voluntary movement of women for development of rural areas through assisting the change agents in implementation of developmental programmes. 12. Implementation of poverty eradication programmes designed for rural women.

13. Development of cooperative projects viz. fruit, vegetable and kitchen gardening, poultry rearing, bee-keeping, handicrafts, grocery stores, etc. minor construction projects-roofing, drainage channels etc.

to help increase their income and improve the standard of living. A special focus on development of peasant and farm women can be made through — 1. Creating a Women Extension Service Cadre in State Department of Agriculture to concentrate on specially identified clientele. 2. Identify and document the needs and problems of Women in Agriculture and accordingly design or refine the new or existing projects/programmes. 3. Promote environmentally and ecofriendly technologies for Women in Agriculture and encourage income generating enterprises to be undertaken by Women in Agriculture. 4.

Incentives for outstanding contribution to boost the morale and encourage greater participation among other Women in Agriculture. 5. Telecast success stories/case studies to motivate the women for active participation in developmental programmes.

6. Modernise the implements/tools being used by women to reduce drudgery and to increased efficiency. In developing countries majority of women contribute to production of crops i. e. food production through manual/skilled labour advisory, extension service and also prepare and cook the food and their men and children thus it can be said that women feed the family, society, nation and the world.

#### Contract farming:

In this era of globalization, the concept of contract farming has been acquiring a greater momentum. Contract farming is a system for the production and supply of agricultural products under forward contracts between cultivators or suppliers and buyers. Here to cultivator commits to provide an agricultural product of a specified type at a specified time and at a specified price that is required by the committed buyers.

The process of contract farming seems to attractive of implemented in its good sense. The main feature of contract farming is that the contractor supplies all the material inputs and technical advise required for cultivation to the cultivator. In turn the cultivator supplies the required land and labour. In India the central government has drafted a model law on agriculture marketing to provide among other things, legal support to contract farming agreements. Some of the state government has entered into a contract farm for various crops.

#### Modernization of Agriculture:

Agriculture is not an industry. It is an art and a way of life dealing with living beings. In the past years, it has undergone great changes all over the world.

The important strategies of Agriculture are: 1. Increased food production 2. Saving the environment and attaining sustainability There has been significant increase in the quantity of food produced and land conserved. This is the effect of modernization. Drawbacks of Modernization: 1. Reduce the number of jobs, people engaged. 2.

Workers replaced. 3. Rural Culture put under pressure. 4.

People migrate in search of work. 5. Local institutions weakened.

6. Resources once considered as precious, has now turned a waste to be disposed off. 7. Water, Soil contaminated. 8. Agriculture has become fossil fuel intensive. 9.

Increased application of pesticide. 10. Agriculture has begun contributing to global warming. Reasons for the rejection of Modern Methods by the poor farmers: 1. High cost. 2. Poor extension. 3.

Inappropriate incentives. 4. Inappropriate innovation. 5.

General unawareness. 6. Local practices are better than modern methods. 7.

Modern methods generate new problems. Modernization of Agriculture in Indian Context: In India when the mechanization of bullock energy changed to power tiller use, about 8% increase in output required 43% increase in energy input. For tractor 13% increase in yield cost 74% extra energy. For wheat tractor 6% increase in yield cost 266% extra energy. Biodiversity Loss due to Modernization of Agriculture: 1. In India, once 30, 000 varieties of rice were grown. But now 10 varieties cover 75% of the whole rice area.

In the U. S. 65 types of vegetables lose 80-100% of the varieties of each since the turn of the 20th century.

Of the 8207 varieties listed in 1903, only 607 are stored in seed forms. The greater the uniformity the greater the risk and danger of pest, risk and disease attack. 2.

Loss of genetic diversity leads to future opportunity to raise adaptable crops and livestock. 3. A farmer prefers multi-cropping, inter­cropping, mixed-cropping but does not standardize his practices. 4.

Farmers do not replace existing varieties of crops by a new variety. Modernization of Agriculture and breakdown of rural communities: 1. Number of jobs for local people gone. 2.

Standardization has reduced the management skills. 3. Rural poverty increases. 4. Food processing jobs are no more localized.

Far away central factories do that work. 5. Growing gap between the rich and the poor.

6. Landscape homogenized; farming system simplified. 7. Youth show less interest in labour intensive farming. Many farms have no successors. 8. Farm size increases, family farms vanishes. 9.

Frustration, financial crisis, suicide on the increase among farmers.

#### Self Help Groups:

Definition: It is a group of rural poor to have volunteer to organise themselves into a group for eradication of poverty of members’’. 3. Stages: (i) Group formation. (ii) Capital formation through revolving fund & skill development. (iii) Income generation through economic activity. Important features of SHG’s; 1.

It consists of 10-20 persons. 2. All members of group belongs to families of Below Poverty Live (BPL). 3. There can be one person from one family. 4.

One person cannot be member of more than one group. 5. Broad alliance with foreign countries.

6. Both public and private investments should be encouraged. 7. An efficient marketing system is available Banking loans to SHG’s: i.

Through NGO/Voluntary agency. ii. NABARD promotes SHG’s (improve rural poor). Objectives: (i) Enabling member to become self dependent and Self-reliant. (ii) Providing forum for members of discussing social and economic aspects. (iii) Enhancing social status of members. (iv) Providing patterns of members for exchange of idea.