



Agriculture policies in India: A Review

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Abstract

Agriculture remains a vital sector and is considered as backbone of the Indian economy, even though its share of gross domestic product (GDP) has declined from around 50 percent in the early 1950s to 20.2 percent in 2020-21. Agricultural employment has also declined, albeit slowly and currently accounts for 52% of the country's total labor force. However the agriculture and allied sector has emerged as the most resilient sector of the Indian economy after the COVID -19 pandemic, with positive growth rates and increasing output in the last two years. India has a net cultivated area of 140 million hectares, surpassed only by the USA. Also, the irrigated area of India (63.26 million ha net and 86.42 million ha gross) is the second largest in the world, after that of China. The country is rich in natural resources and diverse climatic conditions and most of the land can be double cropped. Considering as one of the important sectors, knowledge of various government policies is essential for utilizing much from it. Therefore, in this review we will evaluate all agricultural policies from 1947 under 5-year plans.

The achievement of the agricultural sector has been quite encouraging and has led the country to food self-sufficiency. During the Eleventh Five-Year Plan, the agriculture and allied sector recorded a regular annual growth rate of 3.6 percent, slightly below the target of 4.0 percent but higher than the average annual growth rate of 2.4 percent achieved during the Tenth Plan. This improved representation in recent years is also due to the impressive growth of capital formation in this sector. The gross capital formation in agriculture and allied sector has more than doubled over the past 10 years with an average annual growth of 8.1 percent. As per the latest Agricultural Statistics at a Glance (2022), India is the world's largest producer of pulses, milk, sugarcane, major spices, jute and ranks as the second largest producer of rice, wheat, groundnut, vegetables, fruit and cotton.

Key words: Agricultural policies, Allied sectors, Micro irrigation, Agriculture trade policies, Legislation

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Introduction:

There is always a complex connection between the government and farmers because the government made all the policies for the farmers. Policies are the government plan given to the farmer for the growth of agriculture sector. Every year government promotes many policies for the safety and welfare of farmers. Therefore, there are both positive and negative effects of every policy.

Agricultural policies signify a set of compulsory regulations, which are planned to attain certain public goals (Oskam et al. 2011). Agriculture is a national topic in India, and developing agricultural policy is particularly difficult. But a central list has some of the connected topics. The national agenda must be taken into consideration while developing state policy. The current review aims to highlight the development of all agricultural policies as well as their positive and negative effects since independence. Agriculture pricing and fertilizer policies are also considered here in the evaluation since it is common knowledge that changes input and output price of crops and have a significant impact on farmers' decisions.

Therefore in this review, we will analyze all agricultural policies from 1947 to 1999 under 5-year plans, National Agricultural Policy 2000, Food policies, Seeds and Input policy, National policy for farmers 2007, The green revolution, white revolution, golden revolution, blue revolution, Pradhan Mantri Fasal Bima Yojana, Price policy, Paramparagat Krishi Vikas Yojana, Market Intervention Scheme, Reforming price policy, Food security concern, Food Security Bill 2013, Agricultural Subsidies and Investment, Agriculture Trade Policies, Legalization of Leasing of Agricultural Land, APMC Act, Field Health Card scheme, etc.

History of various agriculture policies after Independence in India

India is a mostly agricultural nation. Even though India's GDP involvement is gradually decreasing, a substantial percentage of the people still depend on agriculture for a living. Our government is working to develop suitable agricultural policies that can help to

increase productivity while using the smallest amount of inputs because this industry has a significant influence on the lives of many people.

The existing division observes how various agricultural policies have changed India since Independence using five-year plans. To study and authorize policies for various agricultural areas, including production, processing, marketing, farmers' access to markets, transportation, etc., many committees have been constituted. The Food Grains Policy Committee, the first of its kind, was established in 1943 and was controlled by Gregory. This committee's major goals were to distillate on food availability, suppliers, distribution and price management. During Second World War, rice deliveries from Burma decreased which lowers food availability in India and it becomes poorer.

At the time of Independence, due to the large number of immigrants and the poor farm produce, the administration faced the food problem. Under Thakurdas, a different body known as the Food Grain Policy body was established in 1947 to address these issues. This group was produced to research various elements of food supply. The ending of controls and limits on the transportation of grains was the main aspect of this program. However, this strategy was unsuccessful.

The Maitra Committee was established in 1950, followed by the Mehta Committee in 1957 and the Venkatappaiah Committee in 1966. These three committees were established to examine and address food-related fears. The following creation of agricultural policy heavily relies on the references made in these committees' reports. They observed the problems with food production and offered suggestions to make it better.

High Powered Committee (1990), led by Bhanu Pratap Singh, made the first effort at a complete agriculture strategy. The material produced by this committee was quite thorough and gave a clear picture of agriculture policy in the most necessary context.

A paper on the exactness of agricultural strategy is created in 1999 while Sh. H.D. Devegowda is the prime minister. The policy paper, however, was never able to reach the floor of the house at that time because of the instability of the administration. Following this, no major attempt was made to create an agricultural program until the National Agricultural Programme was exposed in 2000. The National Agricultural Policy's initial draft was presented to Lok Sabha and approved in the year 2000. All of this took place while V.P. Singh was the prime minister.

It has been noted that in the five decades after Independence, India has never had an official and comprehensive agriculture strategy. Not those policy statements on agriculture had not been made. In actuality, there was quite a number, including ones on infrastructure, technology and the redeployment of land. There were many statements about the food crisis, but the policies, or lack thereof; they include only indirectly address production and productivity while addressing supplies for the public distribution system. There is prominently no policy declaration defining the place of agriculture in the broader economy or its growth. Deshpande and Prachitha (2006) quote GOI (1990) in their article.

Five -Year Plans for Agricultural Sector Development

Although there are five-year plans for boosting the agriculture industry, there is no overall program for dealing with it. The programs that were implemented during the five-year plans are reviewed in this section.

First Five-Year Plan (1951-56)

The agriculture sector is assumed major focus throughout the first five-year plan term. After gaining independence, India experienced severe food shortage issues as a result of decreased production and an increase in refugees. The main component of this strategy was the elimination of the zamindari system, along with the introduction of community development initiatives and the Grow More Food campaign, as well as advancements in areas like marketing, animal husbandry, soil conservation, and fisheries.

This plan led to an increase in food grain output from 54 million tonnes in 1950–51 to 65.8million tonnes at the conclusion of the plan period.

Second Five-Year Plan (1956-61)

The plan expenditure for the agriculture sector during the second five-year plan term was just 20%. The production goal was 80.5 million tonnes, but once the scheme was discovered, the actual production was just 79.7 million tonnes. The main weakness of this plan is that practically all crops, with the exception of sugarcane, were in short supply when it was implemented. The economy suffered as a result of the importation of food grains to make up for the shortage.

Third Five- Year Plan (1961-66)

The central goal of this strategy was to expand agricultural production to fulfill the demands of industry and export while achieving self-sufficiency in food grains. The agricultural industry and irrigation were given more attention in this strategy. High Yielding Varieties Programmes and the Intensive Agricultural District Programme (IADP) were introduced for this reason. In order to start the "Green Revolution" in India, the government brought High Yielding Varieties of wheat and rice that were created in Mexico and the Philippines, respectively. Although the goal of this strategy was to boost yield by up to 30%, outcomes were disappointing because the rise in production in 1965–1966 was only 10% owing to the drought. Due to this failure, the Indian government chose to introduce three yearly plans between 1966 and 1969 instead of a five-year plan.

Three Annual Plans (1966-69)

Minor irrigation became top importance throughout this time, and high yield variety programmes were then implemented. The government established the Food Corporation of India (FCI) and the Agriculture Price Commission during this time. Farmers are guaranteed a minimum support price by the Agriculture Price Commission. The Food Corporation of India (FCI) has a buffer stock to cover changes in the pricing and availability of food grains.

Fourth Five Year Plan (1969-74)

Two objectives were set during this plan period. The first objective was to provide the circumstances necessary for a steady rise in food production of around 5% annually throughout this ten-year period from 1969 to 1978. The second objective was to make it possible for a sizable portion of the rural population, especially small farmers and labourers, to take part in rural development and benefit from it. The actual output discovered was 104.7 million tonnes vs the planned increase of 129 million tonnes, hence the objectives were not met.

Fifth Five Year Plan (1974-79)

A serious economic crisis prompted the introduction of this scheme. This strategy has two objectives. The first was the eradication of poverty, and the second was the achievement of self-reliance through the encouragement of a greater rate of growth and improved income distribution. Rs. 8080 crores were allotted for the development of irrigation and agriculture throughout this plan.

In order to boost agricultural productivity, this strategy prioritized the adoption of High Yield Varieties (HYV) and increased fertilizer, herbicide, and insecticide usage. This strategy was placed on reclaiming desert land, dry farming methods, developing HYV seeds for other crops, and small and marginal farmers. At the conclusion of the fourth year, in March 1978, this proposal was abandoned.

Sixth Five Year Plan (1979-83)

There were two sixth plans. First was under the Janata Party and second one under Congress.

Food grain output surged to 152 metric tonnes during this time, and the agricultural sector had yearly growth of 4.3%, earning the moniker "second green revolution". West Bengal, Bihar, Orissa, Madhya Pradesh, and eastern Uttar Pradesh are among the eastern and central states where this plan has been implemented.

Seventh Five Year Plan (1985-90)

12.79 crores were allocated to agriculture in this plan. Numerous initiatives were launched as part of this strategy. These programmes included the National Watershed Programme for Rain Fed Agriculture, the Special Rice Production Programme in the Eastern Region, the National Oilseed Development Project, and others. Two more years were added to this strategy. As a result, the eighth plan wasn't released until 1992.

Eighth Five Year Plan (1992-97)

The New Economic Policy (NEP), which included stabilization and structural adjustment measures, was launched in 1991. The primary components of this New Economic Policy (1991) are globalization, privatization, and liberalization. The state's role is being reduced, and the private sector is being actively encouraged to participate, on the basis of this strategy. The ninth plan mirrored the same attitude. Significant efforts were made to encourage business ventures, NGOs' involvement, and Panchayat Raj Institutions.

The manufacturing, agricultural, and related sectors' speedier growth was the plan's key component.

Ninth Five Year Plan (1997-2002)

The ninth plan's goals are as follows:

- Create sufficient production, employment, and poverty elimination.
- Ensuring nutritional and food security for everyone, especially the most vulnerable members of society.
- Supporting and growing community-based institutions like PRI, co-ops, and SHGs.

In ninth plan, targeted regions are divided based on agronomic, climatic and environmental friendly conditions. These regions are:

- North western High Productivity Regions
- Eastern Region with abundant water in Haryana and Punjab
- Water-scare Region in Peninsular India and Rajasthan
- Ecologically Fragile Region including Himalaya and Desert Region

In the ninth plan era, National Agricultural Policy 2000 was unveiled. The prior scheme technique has been replaced with a macro management strategy as a result. Several actions were done as part of this plan. Some of them included the founding of the Watershed Development Fund with NABARD in 1999–2000, the launch of the Technology Mission for Integrated Development of Horticulture in the North Eastern Region in 2000–2001, the launch of the Technology Mission for Cotton in 1999–2000, and the launch of the centrally sponsored Farm Water Management Scheme to boost crop production in eastern India in 2001–2002.

The National Seed Policy in 2002, the National Agricultural Insurance Scheme in 1999-2000, the building, modernization, and extension of cold storage in 2000-2001, among other programmes, were also announced. It was not encouraging since the average increase over this time was 2.06% rather than the anticipated growth of 3.9%. The average yearly output rate of pulses decreased from 13.41 metric tonnes to 13.3 metric tonnes. Food grain production increased, reaching 202.58 metric tonnes.

Tenth Five Year Plan (2002-07)

Numerous plans were introduced throughout this plan period. National Horticulture Mission, Micro Irrigation Programme, National Gender Resource Centre in Agriculture, Jute Technology Mission, National Agriculture Innovation Project, National Fisheries Development Board, National Mission on Bamboo Technology and Trade Development are a few of these initiatives. National Rainfed Area Authority (NRAA), Agriculture Technology Management Agencies (ATMAs), and Krishi Vigyan Kendra (KVK) were all established during this plan period in 578 districts throughout the nation. For farmers in 31 districts across Andhra Pradesh, Karnataka, Kerala, and Maharashtra, the government invested Rs 16978.69 crores. This money was utilized to advance seed replacement rate (SRR), watershed development, extension services, and micro irrigation.

Eleventh Five Year Plan (2007-12)

This strategy aimed for 4% annual GDP growth. National Food Security Mission (NFSM), Rashtriya Krishi Vikas Yojana (RKVY), Macro Management of Agriculture (MMA), Integrated Scheme of Oil Seeds, Pulses, Oil Palm and Maize (ISOPOM), National Mission for Sustainable Agriculture (NMSA), and National Project on Management of Soil Health and Fertility (NPMSHF) are just a few of the projects that have been introduced.

Twelfth Five Year Plan (2012-17)

The initiatives started under this plan included the Rural Entrepreneurship and Awareness Yojana (READY), Attracting and Retaining Youth in Agriculture (ARYA), National Agricultural Entrepreneurship Project, and National Agricultural Education Project. The predicted growth after implementing this strategy is determined to be 9% for the whole economy.

India does not have a thirteenth five-year plan. No official economic plans have been created since the Planning Commission was dismantled in 2014, although five-year defence plans are still being created. The most recent time period is from 2017 to 2022. There isn't a thirteenth five-year plan, though.

National Project on Management of Soil Health and Fertility (NPMSHF)

This project was introduced in 2008-09. The main objective of this project was to promote balanced and judicious use of fertilizer in conjunction with organic manure on soil test basis. For this project, various Soil Testing Laboratories are set up. For the target achievement, workshops are organized for the farmers. This project proves useful for the farmers because now there is no need of use of excessive fertilizer. They have to use that particular fertilizer which is required for the crop which in turn reduces the cost of production and increases the productivity.

The main objective of this plan was

- To improve soil testing facilities by establishing more testing laboratories including mobile testing facilities, training and demonstrations and financial support

to promote Integrated Nutrient Management (INM).

- Use of green manure to improve soil health
- To improve fertility of soil by promoting use of soil amendments.
- To promote use of micronutrients in fertilizers to enhance its efficiency.
- Farmers would have access to information about managing soil fertility.

National Agricultural Policy 2000

Main objectives of this policy are:

1. To increase growth rate by 4% per annum in the agricultural sector.
2. Efficient use of resources and conserves soil, water and biodiversity.
3. Equal growth of farmers.
4. Technological, environmental and economic growth

The National Agricultural Policy, according to Deshpande and Prachitha (2006), has not followed some simple steps in evolving a national level policy frame." It omitted the crucial procedures of reviewing prior experience, requesting views, and holding discussions on many policy dimensions, among others.

Agenda for input and output

I) Subsidy for fertilizer

Since the 1960s' Green Revolution, the federal government has been providing this. Its primary goal is to offer farmers fertilizer at a reduced cost to stimulate the usage of fertilizers. Each year, the subsidy grows.

The drawback for farmers is that once they start using fertilizer, they must do so for all subsequent crops. Due to the high expense of fertilizers, if the crop is damaged for any cause, the farmer may experience financial hardship. 90% of farmers borrow money from local brokers, therefore they must pay substantial interest on this sum, and if for any reason the farmer is unable to repay the loan, he will not be eligible for a loan for the next harvests.

II) Electricity Subsidy

Agriculture needs electricity because irrigation depends on the availability and cost

of power. The green revolution introduced electricity subsidies. This is to encourage irrigation. The government is heavily burdened by electricity subsidies. The availability of power at a reasonable cost makes irrigation simple for farmers, who may benefit from this subsidy.

"According to reports from the GOI, input subsidies have led to an overuse of inputs. In turn, this overuse has brought about inputs with lower efficacy due to soil deterioration, soil nutrient imbalance, environmental contamination, and ground water depletion. The rising cost of food subsidies and input costs has also contributed to many states fiscal deficits (Arora, 2013)

III) Credit Policy for Agriculture Sector

The primary factor influencing the development of the agriculture industry is credit. Since the majority of Indian farmers are marginal and small farmers with less than 2 hectares of land, money is their main concern. Regional Rural Banks (RRBs), Scheduled Commercial Banks, Non-Banking Financial Institutions (NBFCs), Self Help Groups (SHGs), and other financial institutions offer credit (Table 1). NABARD was created as a result. The Kisan Credit Card (KCC) system was introduced in 1998-1999, against the Rabi season of 1999-2000, the Indian government implemented the National Agriculture Insurance Scheme (NAIS) to safeguard farmers against crop failure losses brought on by natural disasters including heavy rain, drought, and other calamities. With the exception of Punjab and Arunachal Pradesh, NAIS is now being implemented in 24 states and 2 union territories.

In 50 districts, the Modified National Agriculture Insurance Scheme (MNAIS) pilot programme was introduced during the 2010-11 Rabi season. Crop loans with 7% interest are given to the farmer under the Interest Subvention Scheme (2006-07). The farmers' inability to repay such a large debt is the loan's drawback, though.

Table 1: Relative proportion of various sources of agriculture short-term financing.

Year	Co-operative Bank	Regional Rural Bank	Commercial Banks	Other Agencies	Total Amount(crores)
1999-2000	14.38	2.37	11.39	71.94	102.91
2000-2001	18.75	3.70	15.40	62.34	88.28
2001-2002	23.08	4.66	22.00	50.35	81.49
2002-2003	23.28	5.67	24.98	46.15	84.57
2003-2004	20.25	5.46	23.42	50.95	111.94
2004-2005	15.28	5.64	20.69	58.46	177.98
2005-2006	20.21	7.20	33.34	39.33	173.00
2006-2007	27.90	12.03	60.11	0.00	138.46
2007-2008	22.10	11.31	66.66	0.00	183.54
2008-2009	19.14	10.67	70.26	0.00	210.48
2009-2010	20.58	10.79	68.66	0.00	276.68
2010-2011	20.64	10.77	64.37	0.00	275.59
2011-2012	20.69	11.99	67.40	0.00	396.18
2012-2013	21.69	11.84	66.54	0.00	473.52

Source: Department of Agriculture and Co-operation, Annual report 2011-12

Agriculture price policy

Depending on the quantity produced, agricultural prices might change drastically. The amount depends on a number of variables that may be under your control, like price and delivery, or not, like pests and natural disasters. Price changes have an impact on the farmer's income and their actions about soil management. MSP, or minimum support price, is a crucial part of agricultural pricing policy. The MSP will be revealed based on the cost of cultivation. MSP functions as a guarantee to farmers for the Public Distribution System (PDS) to provide consumers with food security. This policy's primary goal is to promote the adoption of high yielding seeds, fertilizers, and water-responsive technologies, all of which boost production. MSP shields customers against a price increase that is too rapid.

The CACP (Commission for Agriculture Cost and Prices) will make the MSP announcement. MSP now covers 25 different

crops. The farmers' inability to know the true value of their harvest is a drawback of this programme.

Market intervention scheme (MIS)

This programme ensures that farmers receive the minimum price for their crops even in the event that they are destroyed by natural disasters. If the cost of production is higher than the MSP, the central government will purchase the crop at an intervention price that is not higher than the cost of production.

Price support scheme (PSS)

The National Agricultural Cooperative Marketing Federation of India Limited (NAFED) was used by the Department of Agriculture and Cooperation to administer the PSS for the purchase of oilseeds, pulses, and cotton. When prices drop below the MSP, the NAFED purchases cotton, pulses, and oilseeds under the PSS. Purchases made under the PSS are kept up until prices reach or surpass the MSP and stabilize.

Table 2: Minimum support price for food grains according to crop year (Fair Average Quality) (Rs per Quintal)

Year	Paddy common	Coarse cereals	Wheat	Gram	Arhar	Moong	Urad
1990-1991	207	182	227	452	482	482	482
1991-1992	232	207	282	502	547	547	547
1992-1993	272	242	332	602	642	640	640
1993-1994	312	262	352	642	702	702	702
1994-1995	342	282	362	672	762	762	762
1995-1996	362	302	382	702	802	802	802
1996-1997	382	312	477	742	842	842	842
1997-1998	417	362	522	817	902	902	902
1998-1999	442	392	552	897	962	962	962

1999-2000	492	417	582	1017	1107	1107	1107
2000-2001	512	447	612	1102	1202	1202	1202
2001-2002	532	487	622	1202	1322	1322	1322
2002-2003	532	487	622	1222	1322	1332	1332
2003-2004	552	507	632	1402	1362	1372	1372
2004-2005	562	517	642	1427	1392	1412	1412
2005-2006	572	527	652	1437	1402	1522	1522
2006-2007	582	542	852	1447	1412	1522	1522
2007-2008	747	622	1002	1602	1222	1702	1702
2008-2009	902	842	1082	1732	2002	2522	2522
2009-2010	1052	842	1102	1762	2302	2762	2522
2010-2011	1002	882	1172	2102	3502	3672	3402
2011-2012	1082	982	1287	2802	3702	4002	3802
2012-2013	1252	1177	1352	3002	3852	4402	4302
2013-2014	1312	1312	1402	3102	4302	4502	4302
2014-2015	1362	1312	1452	3177	4352	4652	4352
2015-2016	1410	1325	1525	3500	4625	4850	4625
2016-2017	1470	1365	1625	4000	5050	5225	5000
2017-2018	1550	1425	1735	4400	5450	5575	5400
2018-2019	1750	1700	1840	4620	5675	6975	5600
2019-2020	1815	1760	1925	4875	5800	7050	5700
2020-2021	1868	1850	1975	5100	6000	7196	6000
2021-2022	1940	1870	2015	5230	6300	7275	6300
2022-2023	2040	1962	-	-	6600	7755	6600

Source: 1. Ministry of Agriculture, Government of India and annual report of RBI2. Commission for Agricultural Costs and Prices (CACP)

Source 2: Ministry of Agriculture government of India, Economic survey 2011-12 GOI, Commission for Agricultural costs and prices (CACP)

Pradhan mantri fasal bima yojana

This project was launched in 2016. The main target of this project is to resolve the problem of unpredictable nature of farming and to prevent farmers from suicide. This project got on floor from the Kharif season in 2016. This project proves very useful for the farmers.

Agricultural Policies in Asian countries:

Today's agriculture faces a new set of challenges and opportunities. Agriculture is threatened by climate change, soil erosion and degradation, water pollution, projected temperature and sea level rise, increasing threats from animal and plant diseases, and

rising demand for land and other natural resources. The agricultural sector is expected to provide more nutritious and diverse food for a growing population. Urbanization in Asia is accelerating, increasing demand for more diverse and processed foods. At the same time, the agricultural workforce in Asia is ageing, while fewer young people are interested in farming. The commercial seed industry has grown rapidly in Asia over recent years and various laws have been formulated. These laws should be reviewed to ensure that they reflect recent developments in both technology and trade.

Table 3: Seed laws in Asian countries

SNO.	Country	Seed Laws and reforms	Implications in paradigm
1.	India	The 1966 Seed Law, which regulated only registered varieties, is suggested to be replaced by the 2004 Seed Law, which requires all seed offered for sale to be registered under the Value for Cultivation (VCU) criteria. Certification is voluntary. GM Varieties may be registered after environmental approval, but terminator GMOs are banned under this law.	Seeds should be registered before sale. Private sector is benefitted more by the 2004 Seed Law.
2.	China	According to the Seed Law (2000), all the seeds produce for commercial use must be registered and certified before sale. In addition, the state has sovereignty over seed resources. The Seed Law was amended on August 28, 2004; it now provides foreign seed companies with better market access	All seeds produced for commercial purpose must be registered and certified. The new 2004 law allows foreign seed companies better market access in China.

		in China.	
3.	Afghanistan	The Afghan Ministry of Agriculture, Animal Husbandry and Food drafted the seed law. The government was required by FAO and ICARDA to establish seed certification, seed testing, and plant quarantine system, and to set seed quality standards. In accordance to ICARDA draft law, registration and certification for all crops are mandatory for the formal sector. However, exemption is provided to seeds from the informal sector if they are not sold.	All crops should be registered and certified. Exemption is provided to seeds from the informal sector if they are not sold.
4.	Bangladesh	First seed law in Bangladesh was passed in 1977. Like the existing Indian law, only the government notified varieties are subjected to regulation. Five notified crops i.e. rice, wheat, sugarcane, potato, and jutewere mainly handled by public agencies. Under structural adjustment programs, markets for agricultural inputs have been largely liberalized.	Government notified varieties are subjected to regulation. Under the 1997 Seed Act and the 1998 Seed Regulations, private sector is allowed to import and market non-notified seed.
5.	Bhutan	The Royal Government of Bhutan governs the notified seeds according to the Seed Act of Bhutan 2000. Certification is not mandatory. The system is voluntary with no DUS criteria.	Government regulates the notified seeds. The system with no DUS criteria.
6.	Indonesia	Accordance to the Law on Plant Cultivation Systems (1992), Government Regulation on Plant Seed Management was issued in 1995. This law states that farmers' varieties are not covered under this regulation as these varieties are regarded as 'natural varieties' and are therefore not governed by the government.	The plant seeds are regulated by the government. Farmers varieties do not fall under this regulation.
7.	Iran	The Plant Varieties Registration, Control & Certification of seeds & seedlings Act was passed by the government in 2003. This Act covered protection of plant varieties and certification of seed. Public sector can patent national resources like non-improved and wild plant genetic resources in the name of the Government of Iran; whereas private sector can patent improved varieties. Seed & Seedling Registration and Certification Research Institute provide approval for commercial seed production. "Non-improved" varieties need registration in the name of the State at no cost. No other exemptions are provided to the farmers.	The Plant Varieties Registration, Control & Certification of seeds & seedlings Act was passed by the government in 2003. This Act covered protection of plant varieties and certification of seed.
8.	Kyrgyzstan	New seed laws are being drafted with foreign assistance and support in the Commonwealth of Independent States. For example, the Regulation on certification of cereals seeds in the Kyrgyz Republic (2002) was drafted with the assistance of USDA and FAO, which set up a Technical Cooperation Programme project on seed legislation and plant variety protection.	Certifications of cereal seeds are regulated. New seed laws are in process.
9.	Nepal	The 1988 Seed Act and the 1996 Seed Regulations carry out the registration and release of 153 plant varieties. For the exchange, sale, and sharing of certain seeds, minimum procedures are established by the government. People can do as they want. An amendment to the seed law is under discussion.	The 1988 Seed Act and the 1996 Seed Regulations carry out the registration and release of 153 plant varieties.
10.	Pakistan	According to the Seed Act of 1976, only registered varieties of cultivated plants are allowed for sale, exchange, and trade. Certification is not compulsory. More than 350 crop varieties have been registered. The Seed Law is currently under revision.	As per 1976 seed Act, notified varieties are registered and regulated.
11.	Philippines	Seed Industry Development Act, 1992 was passed to promote the growth of the domestic seed industry. No certification is required to the farmers to exchange and sell their varieties. According to the Republic Act No. 7607, Magna Carta of Small	The High-Value Crop Development Act of 1995 boosts farmers to grow nontraditional crops for which it gives several facilities.

		Farmers, "good seed" are "seed derived from certified seed." The High-Value Crop Development Act of 1995 boost farmers to grow nontraditional crops, for which it offers various facilities like loans, exemptions from tax and market linkages. Registration and certification is required for the recommended varieties.	
12.	Sri Lanka	The Seed Act of 2003 requires that anyone marketing seed in Sri Lanka has to be registered with the Director of Seed Certification in the department of Agriculture. All locally produced seed must meet the rules for certified seed production before it can be labeled and sold as "certified seed." FAO's post-tsunami recovery project focuses on certified seed production and improving seed testing and certification procedures.	The Seed Act of 2003 requires that anyone marketing seed in Sri Lanka has to be registered
13.	Thailand	The 1992 Plant Act regulates the notified varieties through a "controlled seeds" licensing system. Governments do not control other varieties.	Regulates the notified varieties through a "controlled seeds" licensing system.

Source: Dastagiri 2008

Summary and Conclusions

India has achieved food self-sufficiency through a combined approach of technology and policies. A country's agricultural policy is usually designed by the government to increase agricultural production and productivity and raise the income and standard of living of farmers within a certain time frame. These policies redesigned for complete and comprehensive growth of the agricultural sector. Making production competitive enough to provide expressive work for everyone could be one way to achieve this.

The central government should endeavor to improve the sector's current mechanisms while including a variety of stakeholders in decision and execution. These policies must be flexible enough to accommodate changes according to the need of farmers. The center's initiatives in creating the National Commission on Farmers should be supported even more. Since farmers are the ones who are most affected, it is important to consider their current situation and the everyday tasks they confront while developing any policy. The necessities of the farmers should guide the setting of priorities. Government programmes intended to better the lot of farmers should highlight effective implementations corded by frequent rounds of checks and follow-ups.

Additionally, government policies should be sector and time specific. There should be a

strategy and action plan for each aim. It is important to have a solid plan and strategy in place before defining what percentage of growth must be attained in a certain time edge.

Since each state's agricultural growth is unique, the state governments must eventually approve and carry out all agricultural policies, including price supports, input grants, produce marketing, and consumer subsidies. Realizing the value of state involvement in policy making is important. The State Government should also accept the central government's policies and aid in its execution. The successful execution of the policy depends heavily on operational coordination between the state team and the central.

It is true that the NAP must be in line with the demands of economic liberalization and globalization, but the government's first goal should be to protect the interests of the farmers. Research and education in agriculture may be useful instruments for preparing farmers for the changing environment.

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