



# India's Food Policy from Green Revolution to National Food Security Bill: Special Emphasis on Madhya Pradesh and Punjab

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## 1 Introduction

The current paper shall be doing the content analysis of the topic India's Food Policy from Green Revolution to National Food Security Bill: A comparative analysis of Indian States - Madhya Pradesh and Punjab. The content analysis shall be providing a vivid background of everything related to the food policies that are elegantly being needed to make the people of India live a better life ahead and allow a decent amount of higher living standard ahead. It can be seen that currently this chapter shall be discovering about the food policies that the central government had ideally been making so that a basic sanity of food security which is the basic necessity for life can be provided for the same. Firstly, the food policies made by the central government from 1968 are probably being brought as a means of green revolution till the food security bill in 2013 shall be analyzed. Further, this shall be analyzing the different states i.e. Punjab and Madhya Pradesh states will also be analyzed where the individual states food security policies and their effect on the state's food security shall be analyzed. Lastly, a comparative analysis of both the states shall be made so that a better understanding of the state's food security improvements that are being made by the central government once those policies are being implemented shall be done. The content analysis of different authors' perspectives on these policies will bring a greater picture of the Indian food security policies, specifically a larger population like India.

## 2. Food policies of central government from 1968 to 2013

The aspects of food security are one of the major things for a growing nation like India where all the family members' access to quality food grains throughout the life entails the proper policy implementation by the central government to control such food grain production largely. The reason is that India witnessed a massive

shortage of food grains particularly during the colonial times due to lack of proper policy for meeting long-term frequent droughts. The major policy reform was made in the fact about the Green revolution that made the food shortages problem to be overcome elegantly. According to (Kumar *et al.* 533781) Green revolution was something that took assistance from the United States under Public Law (pl) 480 for aiding against the food security problems ahead. The introduction of Green revolution at the macro level as policy reform had helped the Indian government to shift to other policies that aimed at improving the attention of public policy for making it shifted to several other areas such. These areas ideally included household access to adequate food, enhancing purchasing power, composition of food basket, production of protein- and vitamin-intensive food items, and improvement in sanitary conditions. Similarly, the policies were reformed as means of directive from the article 47 of the Indian constitution aspects ahead which aimed at increasing the nutritional level of people largely. In addition Mukherjee, Arideep, et al (100220) projected the verses of the article 39 that aimed at certain principles of policy to be followed by the State as means of raising the nutritional level of Indian people. These articles are the major reforms that made the central government formulate different types of food security policies as means of protecting the rights and interest level of the Indian people for obtaining greater food security aspects provided by the states ahead. It should be noted that the Indian economy is somewhat mixed by its nature where public and private companies in terms of protecting food security ideally co-existed. Further, it can be noted that the Planning commission played a huge role which was very much important for designing and monitoring the plan documents in terms of making better food policies ahead. In regards to this () projected that the five-year plan is the ultimate plan that India ideally made which reformed as the overall approach that they ideally took as a means of policy approach for obtaining the food security aspects within the Indian region ahead. Thereby, the policies are part of this five-year plan being made so that part by part such things could be improved and allow the food security aspects to be ever improved until 2014 when the planning commission was being discontinued.

According to Jaacks, Lindsay M., et al (1323-1339) who stated that it was during the fifth five-year plan which aimed at providing a certain basic level of the services and commissions for specified norms so that a basic food level that eradicates the malnutrition problem was being introduced. It not only aimed at developing the basic human resources development activities covering elementary and adult education, health, drinking water supply, nutrition, and rural housing but also helped in developing the basic infrastructure for area development

activities like rural roads and village electrification. It is because of such things that are associated with developing the food security aspects too. Similarly, Alvi, Muzna, and Manavi Gupta (793-796) argued that the central government policy of Integrated Child Development Services (ICDS) Programme started in 1975 which aimed at developing the children welfare was also a greater reforming part of the food security aspects that central

Government aimed at removing the minimum nutrition level for children problems that India ideally faced about. The service not only helped in improving the health check-ups and all but also supplementary nutrition, immunization of the children to protect them from facing any kind of food security problems ahead. It ideally specifies the basic food security services that the central government had provided at preschool levels for children to develop themselves irrespective of food problems that Indian citizens might face due to the lower rate of poverty ahead. Therefore, the main aspect here is about the focus to be made on emphasizing the anthropometric based outcomes measures of the child for their higher nutrition and help them overcome such difficulties ahead. The aspects of the green revolution had sought to be provisioning a massive rate of higher productivity in the areas of the food grains shed so that the asci rate of food security to the preschool level can be provided. It is one of the major food policies that the central government has undertaken for the same ahead so that preschool children can have a diligent amount of higher nutritional values ahead and maintain a decent level of physical health aspects. Thereby, the food policy of using the ICDS aspects is one of the major things that is aimed at making the preschool children develop themselves for better girth aspects ahead. On the contrary, Patel, Sanoj Kumar, Anil Sharma, and Gopal Shankar Singh (253-271) projected the prospects of the food security in India through the ICDS policy, the central government tried to implement food security among the citizens though four pillars. These are ideally and specifically be entailed as the availability, access, utilization and stability ahead. Among these stability pillars is the most vital element as it helped the government to identify those houses particularly which are vulnerable to lack of food grain supply due to higher rate of inter-temporal fluctuations in availability or access to good amount of food grains, the government introduce new policies aimed at securing their food reserve ahead. The main problem that the government tried to overcome through these ICDS schemes is the chronic availability of food grains at the preschool level followed by also helping to develop a good amount of food backup by security aspects initially after the transitory insecurity aspect ahead.

## 2.1 Mahatma Gandhi National Rural Employment Guarantee Act

The Mahatma Gandhi National Rural Employment Guarantee Act was brought by the central government during the year 2005. According to Alam, Asraful, Rukhsana, and Sabir Hossain Molla (171-195) the main objective of the act was to derive about at least 100 days of guarantee to the rural people which assists in improving their financial aspects ahead. The act was mandated as the improvement of food security where the affordability rate of the households was tried to be avoided so that they can be accessing the different aspects of food which are needed to improve their life conditions ahead. It can be united that the adult member of the household is entitled and must be volunteering in doing the unskilled manual labour works to qualify for the act. The major reason is that the act helps in enhancing the livelihood improvement of the rural areas by providing the at least 100 days wage of employment where improvement in the financial aspects would be helpful for them. Similarly, Arora, Sugandh, and Tawheed Nabi (317-330) projected that with 100 days working aspects of those laborers ahead, the economic policy reform was through to be charging ahead both on national and rural level ahead. For this, the current MGNREGA, the workers are used as means of using them with the export-import business particularly in transportation aspects of the food raisin throughout the country ahead. It analyses the fact that the feasible allocation of the social-welfare improves different sectors like the health, nutrition, and education through implementing these 100 days workers ahead. It ideally correlates with the different five-year plan that the government had back in 1970's and 1980's which initiated a minimum needs program developed particularly during the 5th five-year plan ahead. The policy makers here had diligently noticed about the government policies not only proving the food security rather financial stability which indirectly helps them in maintaining the food availability among those rural people ahead particularly by implementing their purchasing power.

## 2.2 Introduction of Green Revolution

The increased demand of food grains among the widespread areas of the country and false dependence of the large scale are for the people within the import where the limited import level of the food grown is not sufficient were diligently understood by the policy makers ahead. According to (d Pritee Sharma) the policy makers had diligently found that the domestic production of the food grains within the continental areas of India was required. The reason is that it could be a good strategy for the home procedure to improve their farming aspects

ahead followed by increasing the food security for the domestic people which can also lead to an increase in export aspects ahead too. The home-grown food signs are thought to be one of the supplemented aspects of domestic production with some imports in deficit years could be at least guaranteeing a minimum level of food security for the Indian people and exporting during the time of surplus as means of economic benefits for them ahead. This made Reuter, Thomas, et al (97-118) to state the fact that the introduction of the green revolution is one of the massive developments that the Indian region has faced since independence to allow the country to overcome the problems of the rice and wheat production which ultimately gave them a basic level of food security through such revolutionary policies. The policy had integrated the production of the high yielding seed together with the improvement in the irrigation of the farming lands, chemical fertilizers to grow crops more rapidly and in a quick manner, pesticides and use of tractors for farming huge land availability areas and to transport them in quick manner to the market whenever shortages might be happening. It also ensured that surplus production could be well-exported followed by stocking during the time of need so that food requirements can be met effectively. The policy had transformed some of the risk-taking farmers from the regions like the Punjab, Haryana, Western Uttar Pradesh, and some parts of Tamil Nadu and Andhra Pradesh were the first to adopt the new technology that transformed the food production system. Similarly, Farrukh, Muhammad Umar, et al (100370) also supported such revolutionary policy of the green revolution as means of application of the HYV in wheat as means of bringing a greater success rate ahead or rising the productivity of the farmers which helped in sending the weight of food grain security around the Indian region ahead. Further, there were institutional changes to be followed as well like consolidated holdings were carried out earlier so that they provided the right environment for the use of new technology and helped in improving their crop production rates ahead. It made the banks treat the agriculture sector as one of the main sectors where priority lending was offered by the banks and farmers got better incentives through better pricing aspects ahead. With such improvement aspects ahead, the revolution solely and steadily spread across the country by the end of 1970 and made India highly self-sufficient in terms of crop production and overcoming the food security problems ahead. Thereby, it analyses the fact that the green revolution policy was one of the major steps in the Indian agricultural aspects which made India take the first step or the attempt toward better and integrated food security aspects ahead for improving nutritional security. The emphasis of the green revolution continued over several plans with adequate financial rise being supplied by the central government to aid an improvement area

in the terms of producing better crops. As things stand during the 1990s, India had become self-resilient in terms of becoming a higher net exporter of cereals since the early 1990's. It also made Ceballos, Francisco, Samyuktha Kannan, and Berber Kramer (105069) to projected the fact that the green revolution under the leadership of the Indira Gandhi and Lal Bahadur Shastri had diligently increased the food grain production aspects particularly in the Western Uttar Pradesh area, Haryana and Punjab where it increased to 81 million tonnes by the end of 1980-81. It can be noted that droughts during the 1965-66 and 1966-66 created a massive emergency of food grain needs and food aid imports from the American regions where such imports were termed "big imports". The reason is that it did not supported much of India's needed and the result it showed is the Green revolution that made India highly self-resilient it only in terms of production but the impedance that the Agricultural sector needed was being pointed by the policymakers so that the le of procurement of an public procurement of food signs could be elegantly increased. The Green revolution's main objective was to showcase about the being during a reasonable support price for the crops which will induce farmers to adopt improved methods of cultivation for increasing production of food grains. Further, the government tried to ensure that consumer prices do not rise unduly so that the poverty levels could be reduced to a drastic level ahead. It is followed by avoiding the excessive price fluctuations within the centre and the state level purchaser of the different food grains market located across the country and reducing the disparity of prices between States. Lastly, the emphasis was made to build up a sizable buffer stocks of wheat and rice from imports and internal procurement as means of keeping excess stocks for meeting the needs during the time of needs. Thereby helping to solve the problems of food nourishment, retirement and security problems ahead. With such that in mind, the formation of the Food corporation of India was found to be happening which on behalf of the government purchased excess amounts of food grains form the farmers and distributed in the public distribution system to the Indian citizens ahead.

### 2.3 Minimum Super Price

The policy is well balanced out policy which is diligently aimed at improving the farmers' concern ahead. According to Dagdeviren *et al.* (106837) who typically states about the fact that the MSP is government intervention which is ideally made by the government for protecting the farmers from facing a significant drop in the price of their sprouts ahead. The price is ideally being set by the government for certain agriculture

products that allows them to buy the crops at certain MSP rates. The MSP rate allows the farmer to obtain a good value of their crops followed by also earning a minimum amount based on which they can start preparing for the next season to make agricultural production ahead. The MSP is effectively being calculated by the government as one-and-a-half times the cost of production by the farmers so that a good revenue is generated and the farmer does not incur any kind of losses ahead. The main thing it provides is about the prevention from any kind of losses followed by the financial stability for the agricultural system to provide a good amount of food security throughout the country ahead. According to Dar, Manzoor H., et al (2014) MSP allows the farmer to get a higher amount of financial stability which in turn helps in increasing the rate of food security ahead. The main reason is that when the farmer overcomes the costs of production for the current season, then they think about future planning from which they can be buying seed and other things needed for farming. The guarantee they ideally get tends to be encouraging the increased production, higher rate of price stability, and the creation of the buffer stocks that are specifically being needed to meet the future food grain needs of the country ahead. Similarly, it also encourages India to have an increased availability of the essential food items that are required during any situation particularly during the time of need or the production rate is low. The major reason is that the Indian population is huge and needs a stabilized aspect of food security so that they can be able to receive a good amount of food grains throughout the year ahead. The aspects of MSP come into play here where it had diligently helped everyone to get a secured way of getting the stable and affordable food supply for the overall population since MSP allows the continuous growth of food grains. Further, Mühlenhoff, Stefan Campos pointed out that protecting the interest of the farmers is one of the most good things the central government of India needs to be doing so that the agricultural sector which is one of the basic fundamental areas of development for a mixed economy like India could be surviving ahead. The MSP here plays such a role where the basic security to the farmers are ideally being presented through the schemes ahead. The reason is that MSP has promised the farmers a or guarantees them a good amount of stability and ensures that the farmers are able to be receiving the fair prices for their crops which will help them to earn a decent amount of money by selling those crops. It not only provides financial stability rather an economic improvement which marks the food security for them to increase as the surplus produced by the farmers can be used for their own consumption too and live the life aspects ahead.

In regards to this, the FCI i.e. Food corporation of India has duly filled MSP aspects ahead along with the state authorities and have fulfilled the responsibilities of acquisition of the significant crops like the Paddy and wheat ahead. Similarly, Sweileh, Waleed M (1-15) project that MSP is highly and continues to be rising thin for India's food security aspects which makes an important statement for the aspects of the public distribution that is being made by the Indian government as means of greater food audit policy. The reason is that MS ensured that the public distribution system supply chain is well versed with the additional aspects for developing the food system distribution and ensuring that everyone recovers the right amount of food. The MPs also ensured that the grain supply whenever there are shortages could be helping the PDS to be supported during such storage times particularly through the restocking that MSP typically allows. The FCI who is in charge of such distribution takes ideal care about such things effectively and takes the stocks for the states that abundantly produces such higher rates of food gains ahead.

#### **2.4 Public Distribution System Policy**

It can be seen that the food production in India is elegantly united and characterized by the seasonality and annual fluctuations owing to change huge rate of climatic changes ahead. According to Ghosh *et al.* (400-424) the Indian government diligently developed a new system called the public distribution system which helps in mitigating this growing problem ahead. It is something called the public buffer storing system policy that includes the procurement and offloading of the food grains into the market as per the demand that is being created. It is one of the main important food security policies that the Indian government has ideally introduced which distributes the food grains in a fair price manner particularly to the urban consumers during any time. Future, it also started to expand in the rural area during the 1980's and 1990's which involved both the union and the state government in such a system ahead. The main handling of this distribution site is being elegantly being done by the Food corporation of India which was set up in 1965 by the central government as part of the bigger plan ahead. They are the statutory body and responsible for storing and procurement of the grains ahead. For this, the state government issues the ration card to the beneficiaries and attributes the food quantities that are entitled against each card to the subsidized rate. The grains are distributed through a series of networks of fair prices. The Commission for Agricultural Cost and Price is responsible for pricing aspects particularly for the rice and wheat. In addition to it, some states had also added major food grains like the sugar, pulses, and

edible oils that are ideally being distributed through the PDS. For this, the FCI maintains the buffer stocks for meeting the demand and supply gap and provides the markets with an adequate amount of food grains if the conditions of the current weather patterns make worries for the Indian states ahead. Thus, it can be analyzed that subsidized amounts of food grains and the central government providing such things is an integral part of policymakers. The PDS works on such behalf which declares the food grains to be provided as per the above poverty line or Below poverty line people. In regards to this, in 2000, the TPDS introduced a category called poorest of the poor households under the Antyodaya Anna Yojana (AAY) that received 35 kg of food grains at highly subsidized rates of Rs 2 per kg for wheat and Rs 3 per kg for rice.

#### 2.4 National Food Security Act

It can be diligently being viewed as the shift of prodigy from the “welfare” to “right based” approach when the NFSA act 2013 was being passed on. The act brought together about the  $\frac{2}{3}$  of the overall population of the country with a reformed national food security aspect that aimed at giving their current food aspects ahead. According to Ganesh, C the act diligently focused on the stipulated public provision of 5 kg of food grains per person per month to eligible households at Rs 3 per kg for rice, Rs 2 for wheat, and Rs 1 for coarse grains. The AAY household continues to receive around 35 Kg of food grains per household basis ahead. It allowed the PDS aspects to be spread across the nation in a sustainable manner ahead. It drew a quantum of rights per household and reduced the poor household holdings not belonging to AAY category due to increased adaptation of the per person criteria ahead. The NFSA empowered the food variability among the country in a stipulated manner and contained different provisions for grievances with social audit being conducted ahead. Similarly, Parashar *et al.* (1123-1128) stated that government intervention in the food market through the NFSA aspects had helped in increasing the 25%-30% total food grain production and two-thirds got ideally distributed through the PDS mechanism in a well manner ahead. The MSP also helped farmers in settling a right farmers since they umami about all of the price control mechanisms ahead. The state preferences of a substantial number of farmers also ensured that farmers get the right price for their production which guarantees their continued interest within the agricultural area ahead. Further, the major difference that NFSA brought with the likes of the PDS is the major guarantee that every household shall be getting and ensuring that the right amount of food grains is being available to them with farmers getting regular earnings for the same ahead also. The electoral gains also allowed

the mass association with the states adopting the NFSA followed by ensuring that the farmers also gained a higher amount of being from the same as well.

### 3 Food Policies of Punjab

The aspects of farming in the areas of the Punjab is one of the prime examples which is a secured state in the Indian economy in terms of food security aspects ahead. Punjab is classified as one of the prime examples of the greater benefits and the costs of the public markets intervention and subsidies that are being offered by the government that gives better lessons to be learned ahead. The reason is that the regions is highly ad effectively being spurred by the industrious farmers and benefiting from extensive rate of irrigation areas where crops ideally recover around 90% of irrigation compared to 40% in other states ahead with higher rate of fertilizer usages doubling all India basis usages and higher tractor density , good markets, increased communication particularly for purchasing food grains during the time of harvesting for purchasing centre followed by state increasing the wheat and rice production the better state government super h led to Punjab coming out as one of the major cities in India to improve through the better food policies for managing their food security aspects ahead.

#### 3.1 Food Security Act in Punjab

According to Puri, Raghav (1-18) Punjab is considered as one of the first states that had ideally impeded the Food Security Act to protect the rights and interest level of the growing population for mitigation of their food requirements and stop exploitation of the farmers for getting the right price for their god grains ahead. The act is diligently expected to be covering around 67% of total Punjab's population i.e. 2.7 crore. The blue card holders which is around 15.4 lakhs fall under this act where their rights get reserved in terms of food security initiated by the Punjab government ahead. The main help that the act is providing to the Punjab regions is the money spent on procuring wheat for open market at a higher rate when they can be saving from their own harvest at a good rate ahead. It said that every family is entitled to recovering around 35 Kg of wheat on yearly basis of their own suitability aspects ahead. The state government allocates around 35 INR on every basis within the budget for such a thing ahead. Further, the problems of the storage of the grain problems are also being eradicated as the government purchasing such grains typically stores them within the different government silos whenever there is an excess harvest being made ahead. Thereby, helping Punjab to overcome the of grain crisis

and also meet the national level crisis whenever needed during the time of need or any shortage of food grain production might be happening ahead. However, the problems of unscientific storage of such wheat in their silo sometimes results in incurring higher rate of cost for incidentals, pilferage and damage of stocks particularly when they are entitled in procuring wheat grains every season.

### 3.2 Green Revolution in Punjab

The aspects of the Green revolution are one of the prime things in India that happened around 1966-67 and Punjab being part of India also falls under such a thing where the development through the Green Revolution in Punjab began from 1966-67 ahead. The aspects of the Green Revolution in the territory of Punjab involves developing and adopting new, high-yielding varieties (HYV's) of wheat, rice, and other food crops that ideally gives them a higher rate of food security aspects ahead. The main help that it provided Punjab farmers was to achieve freedom from import dependence in what and paddy so that India could achieve its self-sufficiency in food grains that allowed them to settle down in terms of producing excessive amounts of food grains ahead. According to () despite Punjab acquiring around less than 2% of the country's total area, Punjab have seemingly contributed over 20% of national wheat production aspects and per 10% of rice production within the year 2003-04. It also contributed massively to the central pool for grains that are diligently benign used for the public distribution system ahead. The green revolution had also extensively brought Punjab with a live example of the most remarkable girth that state had undergone in terms of promoting agriculture ahead. The rapid technological improvement through Green revolution had made Wheat and Rice production to increase followed by productivity advancement too (SINGH, ARPITA). The reason of such thing as the effective use of high yielding varieties (HYVs) of seeds, chemical fertilizers, pesticides, deep tube wells for bringing out groundwater reserves, diesel pump sets for better irrigational facilities, and tractors for carrying the materials of grains and other farming things form the market to the field and vice-versa. Similarly, SINGH, (138-140) projected that use of more advanced means of communication where the grain centres are located at every 8-10 km had made the farmers to diligently connect anyone of their need to specifically sell their products or obtain grains for harvesting. The easy communication between government and the current farmers has ensured that the communication goes up so that farmers do not have to get exploited for selling their harvest and a direct line of communication between government and farmers are established ideally.

In regards to this, the number of lending institutions had an arguable increase in Punjab who prefer less hassle free disbursement of loans ahead. In Punjab, by the end of 1985, the lending aspects within the Punjab farmers had growth strategy where banks had greatest number i.e. 8.8 bank office per lakh population ahead which made the lending aspects to increase sufficiently around 62% lending form Punjabi being the highest among them followed by institutional medium and long term per operational holding was also the highest in Punjab in the years 1980-81 and 1984-85. The credit societies had helped the Punjab farmers from getting exploited by credit lenders at higher interest rate which made the Punjabi farmers to get hassle free loans followed by incurring less amount of credit interest to be borne by them ahead also.

### **3.3 Schemes for distribution of whole wheat fortified under TDPS**

According to Manzoor H., et al (2214) Punjab being the first state to implement the likes of the Food security act has also undertaken massive schemes to protect the food security aspects within the country ahead. The government undertook "scheme for distribution of whole wheat fortified Atta " as their main schemes to customers at subsidized rates to the Panjabi people. It is a state government based program where the government provides the much needed fortified Atta (WWFA) to the consumers in the State for maintaining the nutritional levels of the Punjab whole population. The reason is that whole wheat Atta contains iron and folic that are good for health. Therefore, providing such kinds of things to the Punjab people at subsidized rates ensures that the population can improve their living standards ahead. The nodal agencies ideally issue wheat on monthly election basis that are received from the GOI under the public distribution system that the Indian central government has opened about. It is allocated to the roller flour mills. The mills are government approved which enters into a contract with the nodal agencies for better manufacturing and supply of whole Atta at to the Punjab population particularly the fortified Atta at reasonable rate and the amount that the government has ideally set themselves with. The grains were allocated for the APL holders and it meant for the district wise allocation of wheat where such allocations are ideally being made based on the APL ration cardholders ahead. It is also being entitled for the BPL and AAY categories at a late stage. The public of Punjab residing below an average aspect particularly which is united in the state uses this scheme to distribute the Atta at a fortified rate particularly those that are registered with the government ideally.

Similarly Muhammad Umar, et al (100370) argued that the use of subsidized rate and presenting the food grains at such subsidized rates makes the Punjab government unique with their food grain security aspects ahead. The MSP aspects ideally vary which had made the government to sue such schemes as means of also being the Punjabi farmers being the only state who diligently makes a high rate of contribution to the country's in terms of food grains supply. It typically analyses the fact that the Punjab government with their food security act has ideally made themselves to stay in a unique position for making better and unique food security policies aimed at overall improvement of the food grain aspects. In regard to this Ghosh *et al.* (400-424) projects that MSP in Punjab ideally guarantees and helps in improving the production and overall productivity of the rice and wheat aspects particularly it had encouraged the Punjabi farmers with increased enhancement of producing a higher number of crops in per season and further making investment since they get the right amount of price for the current food grain production they are making. It can be noted that currently, the Punjab government with better policy implementation has allowed the Punjabi farmers to get the right amount particularly it plays an important role in meeting the farmers needs ahead. The reason is that Punjabi farmers produce in high excess of surplus food crops where getting the right price for their production would enable them in future to make surplus production ahead. It also ensured that Punjab being one of the important states in terms of food security all over the country, MSP is an encouraging tool for the Punjabi farmers to continue with their surplus production aspects and keep making investment in the agricultural sector ahead. With such thing in common, Farmers in Punjab receive an MSP of about Rs 60,000 crore annually, with Rs 35,000 crore being the MSP on paddy and Rs 25,000 crore being the MSP on wheat. Similarly, the support from the central government MSP policy specifically for the Punjab state also had encouraged the Punjabi farmers with good returns on paddy fields and cultivation for farmers ahead. In regard to this, the FCI and government agencies control the rate of MSP ahead and allow the production to be maintained ahead. It can be analyzed with the fact that for the greater sustainability of food in the country, availability of the food in the Punjab region is very much essential since Punjab is providing food for all the population in the countywide and ensure greater food sustainability ahead. This can further be improved by showing the sustainability and efforts which will be helping the food availability aspects followed by increasing the food security aspects ahead. Thus, improving the food set for sustainability and utilization aspects ahead.

### 3.4 Punjab food grain transportation policy and public distribution policy

It can be seen that transportation of the food grains to the different areas of the collection centre specifically using the Public distribution centres is the essence for storing the right quantity of food product in a diligent manner ahead. According to Puri, Raghav (1-18) the transportation policy is elegantly being aligned with the food grains and stock articles that are transported by the state procurement agencies and the FCI through an open competitive and transparent tendering process. The tendering process allows the lowest bid person to be allocated the transportation aspects that makes the necessary arrangement of collecting such food grain from the farmers and safely making the food grain reach the godowns of the FCI which can be distributed in an alternate manner ahead. The policy also included the “transportation of food grains” as the transportation of food grains, gunny bales/bags, and other stock articles from mandis and/or railheads to storage points”. It also specifically lays down the act that the various labour and Crate. Thereby, helping the right distribution scheme and policies being undertaken which satisfies the Public distribution particularly being laid by the central government ahead.

In regards to this, Parashar *et al.* (1123-1128) stated that PDS in Punjab is highly an Aadhar enabled system which allows the right set of quantities of food grain being transported to the household ahead through the government fair shops only. It can be noted that the Punjab government is working with the Department of Food civil suppliers and consumers Affairs that has been working with the state government to increase the visibility of the PDS aspects since 1942. It has made the Punjab government implement the ration card system. Similarly, it was also observed that oldest form of the PD aspects was being used by the Punjab government elegantly where the inclusion of the Aadhar card in recent time had allowed the system to be and smarter so that the right set of PDS aspects can be working for providing greater benefits to the people in needs. Punjab is the last state to adopt the smarter PDS aspects particularly entitled to check leakages and curb corporations in the PDS helped in distribution of the 14 lakh families with the right amount of food grains through fair shop aspects ahead. The shops are ideally being connected with the electronic point of sale machines where 40% of the beneficiaries are receiving such kinds of things ahead. The policy entitled in making people around five kilograms of wheat is to be supplied per person per month at a highly subsidized rate of ₹2 per (kg) in and against the market price of ₹22 per kg to a considerable beneficiaries of 1.36 crore beneficiaries particularly

those that are belonging to the poorest family ahead. The beneficiaries are identified as the households which fall in the category of Antyodaya Anna Yojana (AAY) and those that are considered high priority households under the NFSA aspects ahead. As of now, there are more than 170000 fair shops that are opened under the policy to allow the people in getting the right amount of food grains at subsidized rate and increase their food security aspects ahead. Thus, the PDS aspect is working as the safety for the Punjab people, specifically those who are very much poor and do not have the right quantity of financial stability. For this the Punjab government used it as mechanisms of making the policy very much functional at operational and organizational aspects and made it smart to identify the real beneficiaries largely.

#### **4. Food Security Policy in Madhya Pradesh**

The green revolution for the prolific things had happened to the Indian region ahead. According to SINGH, (138-140) the green revolution in Madhya Pradesh (MP) had been visible within the higher production rates of Wheat which has revolutionized the use of modern technologies to grow huge rates of wheat for the real benefit of the people ahead. Thereby with the green revolution prospects, the food grain production within the vicinity of the MP had increased its outputs. It had made the MP's agricultural community to be becoming a dominant factor ahead particularly in making the community more donating ahead . With these things, the impact of Mahajan and Mandal commission, the community is given special reservation which gives the farmers of the MO a political empowerment for sufficient aspects of making the farming products to be used as means of countries with food security aspects ahead. With such thin, during 2014-15 season MP had cooked a growth of 20% which made the state to win the Krishi Kranti award for the highest food production aspects ahead. It ideally analysis the fact that the state had remarkably done well in making progress in the agricultural sector despite being not a food secure state in the country. The green revolution policy had completely changed such a picture where the HYV crops use of tractors and other modern amenities had allowed the state to regain its position with the climatic backup despite it being too hot.

Similarly, Puri, Raghav (1-18) projected that a carefully crafted mosaic of improved irrigation, accessible loans, quality seeds and better roads had paved the ways for the improvement in the MP agricultural aspects ahead given that better pumps for irrigation, modern technologies to build high yield crops through use of pesticides and others is the major reason for such bountiful harvesting. However, when compared to the Punjab's long term success the MP's success rate was not that much yielding which can create certain disbursement of

problems for the farmers. Thereby, despite being the green revolution brought a mammoth improvement in the overall MP's food security aspects, but in long term had decreased soil nutrient level which specifically means that the green revolution is not much green by its nature. Food security might be problematic are ahead.

#### **4.1 Madhya Pradesh Bhoodan Yagna Act of 1968**

The agricultural sector of Madhya Pradesh is one the emerging sector which is aimed at improving the overall food and nutritional security aspects ahead. For this, the government had brought the Madhya Pradesh Bhoodan Yagna Act of 1968 which is efficiently being related with the Madhya Pradesh food security aspects ahead. It is a law that is elegantly benign entitled to the consolidation and amends the law of the Bhoodan Law. According to Sweileh, Waleed M (1-15) the Bhodna yojana is something where their distribution of land idly takes place for the poor particularly among them without the land and for the overall community growth perspective ahead. The landless poor people were given such land so that they could do certain farming works and build up in their community aspects ahead particularly helping them to grow crops which could be helpful for building resilient aspects of the food security aspect ahead among the MP people. Similarly, with these lands being allocated it has given the MP farmers a new era of farming where they can be able to be growing the different food crops like the Rie, Wheat and Sorghum. It is observed that with higher rainfall in the eastern part of the MP rice is grown eminently followed by Wheat and Sorghum is grown more rapidly in the western area largely.

In regards to the above things, Parashar *et al.* (1123-1128) projected that the MP agriculture policy had somewhat changed drastically where basic adaptation of certain agriculture based policies had been underlined for the same ahead. Firstly, the principle entails in assuring and providing adequate income per capita of the farmers. Secondly, it is indeed more economic viability and sustainability of producing a higher rate of agriculture. Thirdly, farmers are made the focal point particularly those that were without any kind of landholding with them ahead. Fourthly, policy is being made futuristic with other orientations and providing greater benefits. Lastly, a policy instrument is specified with policy orientation aspect ahead for enabling better and integrated aspects of growing more crops that supports the local farmers' needs ahead. Thereby, the principles had specifically focused on the overall agricultural improvement for MP so that a decent food security aspect can be provided to them and allowing the region to profit from the bountiful harvesting. Similarly, with such an act in place, MP is also being considered as a soybean state where different crops apiary for Rice and Wheat are produced had given the farmers a new direction to grow crops that are sustainable for nutritional

level improvement ahead. The reason is that paddy and wheat emerged as high yield crops which yield around. The average yield of paddy was 898 kg./ha. in 1956-57, which increased to 1,059 kg./ha. in 1999-2000, whereas in the case of wheat, it increased from 533 kg./ha. to 1,938 kg./ha. The productivity of maize in the state is satisfactory (1,586 kg./ha.), but it is below the national yield of 1,785 kg./ha. Similarly, projected that growth rate when compared to other states has seen a massive boom of such production rate particularly in certain areas of production like the heat, soybean, rapeseed mustard and to some extent in the case of gram during the period 1984-85 to 1999-2000. However, with fluctuation of the monsoon season that desperately remains wider on MP which might be a confined area. Thus, it can be analyzed that with the green revolution and other police specifically giving away land to landless had allowed the food security to be improved through the agricultural sector improvement that had helped the poor people to at least obtain certain areas for their sustaining nature ahead. Thereby when compared to short term growth with the long term growth (1967-68 to 1999-2000) with short term growth rate (1984-85 to 1999-2000) in Madhya Pradesh, the short term growth had been fantastic apart from Soybean production. It specifically means that growth in such crops is the result of fall in other crop production rates ahead where productivity increase has resulted in productivity increase rather than area expansion. It gives a higher sense of MP farmers prosperity to focus on food security aspects with the help of different acts that the M government sets out for increasing the food security among the state ahead.

#### **4.2 MSP policy in Madhya Pradesh agricultural sector**

MSP is a central government policy intended for the agricultural sector to improve by promising the farmer a security of their investment that is made. According to SINGH, (138-140) extension of the MSP aspects i.e. minimum selling prices for the food grains has ensured that MP farmers recover the right step of consumption for their food grain production aspect ahead. The MSP is set both for wheat and rice producers with a decrease in the overall consumers aggregate consumption expenditure. It had made the area under wheat production increase by 9%. Area under pulse crops decreased to 15% to 28% to accommodate more whites and rice prosecutions. Similarly, the feasibility of the MSP had widely seemed to be happening in the MP regions particularly on the rice crop other than wheat, and sugarcane. The MSP aspect of wheat is around 2125 INR per quintal. The reason for better MSP had made MP to be the second largest contributor of Wheat particularly to the central pool ahead. On the other hand, () projected that MSP burden reduction had allowed to start the crop diversification initiatives. It is one if the major policy implementations were the government hiking the MSP

aspect to promote the other crop percussion too and provisioning a better nutritional security that will ideally led to food security aspects ahead. Therefore, with such things in hand, the government is trying to bring a food security policy that is intended for the statement like the creation, facilitations, and strengthening for enabling a better environment. It would be allowed to develop an integrated and cohesive chain of common for having an end to end solution for the same head.

With the above things, the MSP also allows the PDS network to be improved widely. According to Muhammad Umar, et al (100370) the government led initiatives had allowed the PDS network to be more efficient in Madhya Pradesh where involvement of the self-help groups had ideally been settled down ahead. For this, the self-help group about the involvement of more women's involvement that allowed the personal touches with such food distribution networks ahead. The local network group allied with the distribution networks made better management of the SPS ahead. The main helpings about the efficient operational improvement where fair priced shops are being introduced. The policy is intended to be making a decent allocation for the two days village per week so that overcrowding at the FPS is being dismantled ahead. The aspect of wastages of ration materials ratio is also marked to be down so that distribution of the essentials can be made elegantly. The reason is that in case of emergencies of migration, social and private functions, the beneficiaries are highly giving food grain on priority basis which typically reduce the possibility of exclusion. Thus, giving a fair deal about the beneficiaries so that their food security during emergency and normal conditions could be moving ahead. The feeling of community first within the FPS is increased specifically for the member who receives the food grains on last bias after the community is benign served for the same ahead.

#### **4.3 National food security policy impact on Madhya Pradesh**

The provision for the NFSA aspects had given the food safety of the MP people answer heights for the same ahead. The policy ideally includes about the 75% of the rural population and 50% of the urban population with an end access to the subsidized food grain ahead. It had an increased number of fair priced shops i.e. more than 24000, 22,461 co-op societies, 543 FPS, and various other self-help gossip followed by ration card holders too. The category of ration card idly falls around the priority Household and Antyodaya Anna Yojana (AAY) households. Further, Rural craftsmen, Marginal farmers, Slum dwellers, Artisans, Destitute individuals, Landless laborers, BPL families of the MP population are also being included ahead where subsidized food grains are provided to these people. Thus, its analysis the fact that the MP people's food security is raised

diligently here stress on the poor landholders are being given more time and allowed their living standards to be on the higher side ahead. In MP, each category of people living in urban or rural areas is entitled to receive around 35 kg of food grains per month or 5 kg per person per month. For PHH cardholders of the MP state, the food grains are subsidized at a price of Rs.3 per kg for rice, Rs.2 per kg for wheat, and Rs.1 per kg for coarse grains which ideally helps in further improvement of the food security aspects ahead for enabling the people had better security apex ahead. Thereby, analyzing the government support for the poor and needy ones with better security aspects only.

#### **4.4. Comparison of Food security policy of Punjab and Madhya Pradesh**

The aspects of the food security within the Punjab and the Madhya Pradesh have drastically changed to good level where Punjab being considered as one of the major contributors of food security followed by the Madhya Pradesh racing the best agricultural award from the central government. According to Manzoor H., et al (2014) the aspects of the green revolution is the major cause for such a thing where the use of the Green revolution to improve the food yield capacity using modern machines, tractors, irrigation pumps had led to increase in production of paddy and wheat crops ahead. When compared to Punjab Madhya Pradesh resides in the back seat particularly given that Punjab had used the Green revolution to greater aspects for enabling their food grain production to a new height. The willing nature of the Punjab farmers despite having less than 2% land availability area with surplus production and dedication towards securing the food aspects within the region had ensured that Punjab became the eminent figure in the country to be leading the race for wheat and paddy crop production aspects ahead. Similarly, Madhya Pradesh had also reluctantly well where the state had undergone massive change and regulation change for which they had brought the likes of the land ownership acts that proved lands to the people who are landless. It gave a massive boost for the food security aspects of landless people getting financial stability and guarantee of ploughing the field and doing farming works based on which new crops can be grown in minimal ways.

In regards to the, the food security aspects here are entitled to improve followed where Punjab is the first state that had brought by the food security act on their own. It made the people getting attached with the food security where subsidized nutritional food grains are provided and follows the betterment of the Public distribution system to aggregate aspects ahead. Madhya Pradesh on the other hand also digitized their ration card system to mitigate the growing problems of irrelevant people applying for rationing subsidized wheat and other grains.

Thereby, it directs about the fact that both the states had reluctantly done well with the revolutionary aspects that are ideally needed for food security apt had done to make sure that every state people because the required nutrition and hunger can be eradicated as per the goals being set by the central government.

Green revolution is another mechanism that allowed the states to be improving their agricultural aspects ahead. According to Sweileh, Waleed M (1-15) had diligently stated about the fact that Punjab is the most vicious state which have benefited the most from the green revolution ahead. It hailed a massive success rate ahead leading to short-term improvement in the overall production of food grains ahead and producing a surplus to meet the nation's needs also. The intensive use of irrigation improvement by using the petrol based irrigation pumps, Punjab had been able to water their fields on a regular basis. Further, they also used pesticides to good effect which made the crop variant to be improving ahead and quickly producing on greater basis that created a huge surplus. The transportation policy is also backing Punjab where within 6-8 kilometres on roadways had enabled the farmers to use the collection centre for the greater benefits ahead. The large landholdings areas benefited the site where the economic disparities with the Madhya Pradesh farmers could be seen. Thereby, with agricultural improvement in the Punjab compared to Madhya Pradesh the food security among the Punjabi people also improved drastically than MP people given that both the state government and working with finite things to make diligent shift in the agricultural areas. The policies are we laid and the green revolution is the major mechanism that has helped in such things ahead particularly helping the resident to live in a well manner ahead.

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