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National Agriculture Related Policies
Success Story of a U.P. Farmer

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Volumes have been written about agriculture in India, but the success stories of farmers are rarely written. Realising the importance of farmers in agriculture, of late, National Policy for Farmers (NPF, 2007) has been framed. But how far the Policy initiatives taken so far have benefited the farmers has to be critically analysed. Wide gap exists between the theory and practice in Indian Agriculture. Theoretically our documents are well written, but our theories are rarely practised at user level. In this paper, an attempt has been made to high light the policy initiatives and the success story of a U.P. farmer.

THE FARMERS, THE *ANNADATA* OF ours, are the most miserable people in India. The resource poor farmers are becoming poorer and the rich are becoming richer, in- spite of the huge amount of money being spent by the government in the execution of various policies and programmes. According to Aruna Roy, an I.A.S. and now a political activist working in a rural area of Rajasthan, we the richer and the so called educated people are the cause of the miserable condition of farmers and other poorer sections (9).

Our newspapers are always busy to highlight the negative activities being performed in the country. Few document are available about the success stories of the farmers, the real heroes of the country. It is therefore planned to write a serious of articles on success stories of farmers, in Fertiliser Marketing News. A few articles have already appeared in earlier issues of the journal (1,2,3). One such article about a success story of a farmer finds a place in the present issue of Fertiliser Marketing News.

National Policies

Realising the importance of Agriculture in the food security and poverty alleviation, Government of India has, of late taken a series of initiatives. Some of these initiatives are reproduced.

Recent Initiatives

(i) Bharat Nirman; **(ii)** National Rural Employment Guarantee Programme; **(iii)** National Horticulture Mission; **(iv)** Expansion of Institutional Credit to Farmers; **(v)** Establishment of the National Bee Board; **(vi)** Establishment of the National Rainfed Area Authority; **(vii)** Establishment of National Fisheries Development Board (NFDB); **(viii)** Watershed Development and Micro Irrigation Programmes; **(ix)** Reforms in Agricultural Marketing and Development of Market Infrastructure; **(x)** Revitalisation of Cooperative Sector; **(xi)** Agri-business Development through Venture Capital Participation by the small Farmer Agribusiness Consortium; **(xii)** Reform and Support for Agriculture Extension Services; **(xiii)** National Rural Health Mission; **(xiv)** National Food Security Mission; **(xv)** Rashtriya Karishi Vikas Yojana to incentivise Framework for Warehousing Development and Regulation; **(xviii)** Protection of Plant Varieties and Farmers' Right (PPVFR) Act, 2001; **(xix)** National Bamboo Mission and **(xx)** Knowledge Connectivity through Common Service Centres (CSC) and its initiatives.

National Policy For Farmers (NPF)

The National Agricultural Policy approved by the Government of India during 2000 aimed to achieve annual growth of more than 4% in the agriculture sector. However the annual growth rate achieved in 10th plan was only 2.3%. On the other hand the non-farmer sector has grown faster, creating the wide disparity between agriculture and non-agriculture sector. For the first time in History of Indian Agriculture, the Ministry of Agriculture brought the National Policy for Farmers (NPF, 2007).

The major goals of NPF are :

(i) To improve economic viability of farming by substantially increasing the net income of farmers and to ensure that agricultural progress is measured by advances made in farmer's net income.

(ii) To protect and improve land, water, bio-diversity and genetic resources essential for sustained increase in the productivity, profitability and stability of major farming systems by creating an economic stake in conservation.

(iii) To develop support services including provision for seeds; irrigation, power, machinery and implements, fertilisers and credit at affordable prices in adequate quantity for farmers.

(iv) To strengthen the bio-security of crops, farm animals, fish and forest trees for safeguarding the livelihood and income security of farmer families and the health and trade security of the nation.

(v) To provide appropriate price and trade policy mechanisms to enhance farmers' income.

(vi) To provide for suitable risk management measures for adequate and timely compensation to farmers.

(vii) To complete the unfinished agenda in land reforms and to initiate comprehensive asset and aquarian reforms.

(viii) To mainstream the human and gender dimension in all farm policies and programmes.

(ix) To pay explicit attention for sustainable rural livelihood.

(x) To faster community-centred food, water and energy security systems in rural India and to ensure nutrition security at the level of every child, woman and man.

(xi) To introduce measures which can help attract and retain youths in farming and processing of farm products for higher value addition by making it intellectually stimulating and economically rewarding.

(xii) To make India a global outsourcing hub in the production and supply of the inputs needed for sustainable agriculture products and processes developed through biotechnology and Information & Communication Technology (ICT).

(xiii) To restructure the agricultural curriculum and pedagogic methodologies for enabling every farm and home science graduate to become an entrepreneur and to make agricultural education gender sensitive.

(xiv) To develop and introduce a social security system for farmers.

(xv) To provide appropriate opportunities in adequate measure for non-farm employment for the farm households. (7)

Asset Reforms to Empower Farmers

Land

Considering the skewed ownership of land, it is necessary to strengthen implementation of laws relating to land reforms, with particular reference to tenancy laws, land leasing, distribution of ceiling surplus land and wasteland, providing adequate access to common property and wasteland resources and the consolidation of holdings. Following the conferment of land rights to women under the Hindu Succession (Amendment) Act, 2005, the provision of appropriate support services to women farmers has become urgent. Joint pattas for both homestead and agricultural land are essential for empowering women to access credit and other services.

The Land Acquisition Act should be reviewed with particular reference to the assessment of compensation. Prime farmland must be conserved for agriculture except under exceptional circumstances, provided that the agencies that are provided with agricultural land for non-agricultural projects should compensate for treatment and full development of equivalent degraded/ wastelands elsewhere. Further, the commitment under the existing re-settlement policy of the Central/State governments should be fulfilled in letter and spirit. For non-agricultural purposes, as far as possible, land with low biological potential for farming would be earmarked and allocated. State governments should be advised to earmark lands with low biological potential such as uncultivable land for non-agricultural development activities, including industrial and construction activities. (7)

Water

Non-availability of timely and adequate water for irrigation is now becoming a serious constraint in achieving higher productivity and stability of farming in many parts of the country. Therefore, assured irrigation is the need of the hour. Though the total rainfall in our country is satisfactory, its distribution is highly skewed. Therefore, rainwater harvesting is important. It has been assessed that even a 10% increase in the present level of water-use efficiency in irrigation projects may help to provide lifesaving irrigation to crops in large areas. Water-use efficiency can be further enhanced by generating synergy with seed varieties, nutrients (macro and micro) and farm implements. The concept of maximizing yield and income per unit of water would be used in all crop production programmes. Water Users' Associations (WSA) should be encouraged to gain expertise in maximising the benefits from the available water.

The majority of farmers depend on groundwater for irrigation. This resource, in which farmers may have invested their hard-earned savings, is being depleted and the water table is receeding fast. Therefore, rainwater harvesting and aquifer recharge would be accorded priority for ensuring the stability and sustainability of water supply. Water quality also needs attention, since it often gets polluted at the source due to its over-exploitation and the indiscriminate use of fertiliser, pesticides and toxic chemicals.

Besides addressing the problems relating to adequacy and quality, equity in water distribution would be ensured. Water is a public resource, and not a private property. Therefore, priority would be given to evolve mechanisms for just and equitable access to water and to include local people in managing water resources. Women would be given a significant role as water users, both in access and management. (7)

The following steps should be taken for augmentation of water availability and its efficient use : **(i)** Rainwater harvesting and aquifer recharge should be given priority for ensuring the stability of supply. Necessary legislative measures to regulate and control the development and management of ground water would be taken up simultaneously.**(ii)** Existing wells and ponds would be renovated.**(iii)** Demand management through improved irrigation practices, including sprinkler and drip irrigation, and through Pani Panchayats of water users associations would be accorded a high priority.**(iv)** A water literacy movement would be launched and regulations should be put in place for the sustainable use of ground water.**(v)** Integrated and coordinated development of surface and ground water resources and their conjunctive use would be envisaged right from the project planning stage and should form an

integral part of project implementation.**(vi)** In water-scarce areas, the land-use system should emphasise the cultivation of crops of high value and requiring less water such as pulses and oilseeds.

Symbiotic interaction and convergence of efforts should be made through various initiatives of the central / state governments such as the National Rainfed Area Authority, the National Horticulture Mission, the Technology Missions on Oilseeds and Pulses and the National Rural Employment Guarantee Programme to promote water-use efficiency and water conservation measures.

For drought-prone areas, a Drought Code should be introduced identifying the action needed to minimize the impact of adverse monsoons and to maximize the benefits of a good season. Similarly, in areas prone to heavy rainfall, a Flood Code should be introduced to mitigate distress, take care of the needs of the farmers immediately after floods and help convert the flood-free seasons into major agricultural production periods. For the arid areas, a Good Weather Code should be introduced for taking advantage of accessional heavy rainfall for strengthening the ecological infrastructure essential for sustainable livestock dune stabilisation. The National Rainfed Area Authority would provide technical and other support in this regard. (7)

Livestock

Livestock, including poultry, is also one of the important sources of livelihood, contributing about one fourth of the agricultural GDP. These activities engage women in much larger proportion. The ownership of livestock is much more egalitarian since poor farmer families mostly own cattle, buffalo, sheep and goats. The major constraints experienced by farmers relate to breed, fodder, feed, healthcare and remunerative prices for their produce. There is a need to address these issues through an appropriate strategy. Further to enhance the income of livestock owners, agri-clinics operated by veterinary and farm science graduates should be encouraged to improve productivity and overall efficiency of livestock. At the same time, crop-livestock mixed farming systems should be promoted, apart from encouraging production of organic manures and bio-fertilizers. Livestock insurance should also be revamped and made accessible to all farmers. (7)

For poultry farming, the following steps should be taken :

(i) Quarantine and testing facilities for imported birds and vaccines at all ports of entry should be established and strengthened, since such safeguards are necessary for the health and survival of the poultry industry and for the protection of life and livelihood.

(ii) Testing for safety and efficacy of imported poultry vaccines before they are allowed to be marketed, as is done in the case of human vaccines, should be made compulsory.

(iii) Poultry rearing should be recognized as an agricultural activity and appropriate support should be provided to backyard poultry farmers to promote clusters or small holders' poultry estates.(7 **)**

SUCCESS STORY OF A U. P. FARMER

UTTAR PRADESH (U.P.) IS THE MOST populous state of India. It produces highest amount of foodgrains (about 40 mt), it has the highest area and production of sugarcane. It is also the second highest producer of vegetable. U.P. mango and guava are world famous. Rice-wheat is the main cropping system in the state. U.P. occupies the first place with a total length of rivers and canals at 31.2 thousand km which is about 17 % of the total length of rivers and canals in the country (8). Western U.P. has very old (more than 160 years) irrigation system built during British rule. The system is known as Upper Ganga Canal (UGC) which has been renovated recently to provide irrigation to the farmers of this area.

Mr. Chandra Pal Singh, S/O Nathu Singh, Village Vinyatpur, P.O. Dashna Distt., Ghaziabad, U.P., (M) 9313177277 / 9015140206 has been practising rice-wheat cropping system for a long time. As the Ganga canal runs through his village, he uses canal water for irrigating the crop. However, if canal water is not available, he uses tube-well water though the cost of irrigation through tube-well is much higher. The cost for irrigation through canal water is only Rs.750/-, while the cost of tube-well irrigation in rice amounts to Rs. 20,000/- per ha This makes a lot of difference in the cost of rice cultivation. Similarly in wheat, the cost of irrigation again is only Rs.750/- per ha, while the cost for tube-well irrigation in wheat is 5000/- rupees **(Table 1)**.

U.P. has the highest area both in rice and wheat but the yield is not high. The yields obtained by Shri Chandra Pal in both rice and wheat were much higher than yield of U.P. and that of the Ghaziabad District **(Table 2)**.

Rice

The rice variety grown was Venita 1121 and Pusa Basmati. The yields obtained in canal and tube-well irrigated rice crop were 47.5 and 49.0 q/ha respectively. The total net profit for rice irrigated through canal amounted to Rs.71,050/-, while the net profit for tube-well irrigated crop was Rs.45,425/- **(Table 1)**.

Wheat

Wheat variety grown was RR 226 and the yields obtained were 46 and 48.5 q/ha in canal and tube-well irrigated crop respectively. The net profits were Rs.38,275/- and 28,300/- respectively. The data presented in the table clearly indicate that though the yield obtained in tube-well irrigated crop were slightly higher, but the profits were considerably less.

The total profit from rice and wheat in canal irrigated condition was Rs.109,290 / ha, while under the tube irrigated condition the profit was Rs.73,725/- ha.

Table 1 – Economics of rice and wheat cultivation (Rs/ha)

Sl.No.	Particulars	Rice Venita = 1121	Rice Pusa Basmati	Wheat R.R. 226	
	Variety irrigation	CT	TI	CT	TI
1.	Land preparation	1250	6800	1250	6875
2.	Seed	1500	1800	1375	2000
3.	Planting/seeding	3125	3750	0250	1250
4.	Fertilisers	3150	3350	2700	2900
5.	Manures	0800	1600	0900	0800
6.	Irrigation	0750	20.000	0750	5000
7.	Plant protection	1250	1750	1250	1750
8.	Weeding	6250	6825	1600	2000
9.	Harvesting	5000	6000	3750	5000
10.	Threshing	0710	1200	5000	5600
11.	Others	5000	5750	4000	4375
12.	Total	28,785	58.825	22325	37.550
13.	Yield (q/ha)	47.50	49.00	46.00	48.50
14.	Price/ (Rs/q)	2000	2000	1100	1100
15.	Income (Rs.)	95,000	98.000	50.600	53.350
16.	Straw (Rs.)	4800	6.250	10000	12.500
17.	Total	99,800	104.250	60.600	65.850
18.	Net profits (Rs.)	71,015	45.425	38.275	28,300

CT = Canal irrigated, TI = Tube well irrigated

Table 2 – Area production of yields of rice and wheat in some important states of India and Ghaziabad district of U.P.

States	Rice Area	Rice Yield (q/ha)	Wheat Area	Wheat Yield	Remarks
A.P.	3.98	33.44	-	-	
T.N.	1.79	28.17	-	-	
Assam	2.32	14.22	-	-	
Bihar	3.57	12.37	21.16	20.58	
Orissa	4.45	16.94			
W.B.	5.71	25.75	0.35	26.02	
Haryana	1.07	33.61	2.46	41.58	
Punjab	2.63	40.19	3.49	45.07	
U.P.	5.70	20.63 (31.25)*	9.11	28.17	
Ghaziabad Distt.	21847	23.16 (35.09)*	905.16	31.88	
M.P.	1.55	9.38	3.74	16.12	
Chattisgarh	3.75	14.46			
Maharashtra	1.57	19.03	1.26	16.59	
Rajasthan	0.112	20.31	2.59	27.49	
Gujarat	0.76	19.42	1.27	30.13	
India	43.91 (96.69)	22.02 (33.36)*	28.03 (78.02)	28.02	

* Uncleaned rice
Source : Fertiliser Statistics (2009) & Fertiliser and Agric. Statistics, Northern Region, (2008-09), FAI, New Delhi

Table 3 – Fertiliser use in rice and wheat by the farmer (Mr. Chandra Pal)

Nutrient	**Crop**	
	Rice	**Wheat**
N	130-140 (through urea and DAP)	130-140 (through urea and DAP)
P_2O_5	60 (through DAP)	60 (through DAP)
K_2O	- NIL -	- NIL -
State (U.P.) Recommendation (N-P_2O_5 Kg/ha)	120-60-60	150-60-40

Organic manure : (FYM about 15 t/ha) and 25 kg Zn So_4 / ha are applied to rice only

Fertiliser Use

Data presented in Table 3 indicate that Shri Chandra Pal used 130-140 kg N and 60 P_2O_5 in both rice and wheat. In addition, he applied about 15 t/ha FYM and 25 kg zinc sulphate to rice **(Table 3)**.

One of the most important reason of low yield generally obtained Rice and Wheat in the country is serious weed infestation which eats up about 35% plant nutrients. (11) This results in poor yield. Phalaries minor and wild oat infestation is common in U.P. But interestingly the wheat field of Mr. Chandra Pal was weed free. In the **Photo** Mr. Chandra Pal is seen to show his weed free wheat to his fellow farmers. He hopes to get a yield of 5 t/ha this year.

Mr. Chandra Pal is an employee of a private organization in Delhi and at the weekend he goes to his village and devotes considerable time in supervising the cultivation of the crop he grows. If he would have devoted full time to agriculture the yield and net profit would have been higher. It may be true to some extent but regular job provides a regular income without risk. There is considerable risk in agriculture and the net profit earned is much less than what he gets from the salary he earns. This is the reason why many people of Western U.P. are employed in Delhi, Ghaziabad, Noida , Faridabad and do part time farming. It is very common phenomena throughout the country. The farmers who are in service and also practising agriculture are economically better of, than the farmers who depend on agriculture only. Thus the agriculture might suffer. It may be a national loss but for the individual farmer, it is a gain which cannot be always measured in term of money.

Social and Educational Gain

Mr. Chandra Pal has gained immensely socially and educationally in addition to

Mr. Chandra Pal (extreme Right) is seen to show his weed free wheat to his fellow farmers.

the economical gain he obtained from the salary that he earns. He realized through the activities of his colleagues in the office that education of children was the most important tool to up-grade his family from the social and educational limitation that he and his forefathers had unfortunately suffered for ages. Here he observed that the officers of the orgaqnisation used to give prime importance to the education of their children. This provided a great motivation for him to provide higher education to his children. This worked very well in his case. In a way he is a lucky ones among his colleagues because his children's were very much attentive to get higher education. It is a great pleasure to mention that his elder son is in a good position in Delhi and the second son is doing Engineering from BHU. This is a great achievement for a man who is in a so called lower category of job. Early marriage is a rule in his society, but he did not yield to the social pressure. He got his elder son married only after the completion of his education and after the son got regular and gainful employment. He is a shining example, (a role model) whom his closed relatives, friends and Kisan brothers may like to emulate.

Potential of Additional Crop

Mr. Chandra Pal has technical knowledge and money to plough back to grow additional crop during summer season. Crops like maize (fodder) and green manuring crops like dhaincha and pulse crops like moong could be conveniently and gainfully grown. These crops could add to his income and also increase the production and productivity of important crop. Like pulse, which India is importing Dhaincha may add about 80kg of N through biological nitrogen fixation and fodder crops will help improving milk production of the cattle he has. In this area, there is a great scope to grow vegetables which will fetch very

Table 4 : Improving Water Productivity and Profitability with Crop Diversfication Options in Winter in Sikandrabad, Western Uttar Pradesh (2005)

Treatments	Yield (t/ha)		Returns (Rs/ha)		Irrigation	
	Total[1]	Wheat equivalent[2]	Gross	Net	Water Use (m^3/ha)	Productivity (Wheat Equivalent Kg/m^3)
English carrot on beds	45.0	10.63	108.000	68.000	2.500	4.25
Desi carrot on beds	43.5	10.10	104.400	64.400	2.500	4.04
Desi carrot on riddges (traditional system)[3]	38.5	5.78	77.000	37.000	2.800	2.06

Source : Note : 1. Average of 3 farmers
2. Wheat equivalent yield calculated based on product value using minimum support price of wheat (MSP)
3 Traditionally carrot seeds are surface boardcasted before ridge making Source (4)

Table 5 : Effect of Intercropping Systems on Productivity and Profitability of Baby Corn andWinter Vegetables at Sikanderabad (2006)

Cropping System	**Yield (t/ha)**		**Gross Returns (Rs/ha)**			**Productiion Cost**	**Net Returns**
	Baby Corn	**Intercrop**	**Baby Corn**	**Intercrop**	**Total**	**(Rs/ha)**	**(Rs/ha)**
Baby corn + red beets	0.85	25.5	63,750	76,750	140,250	26,500	113,750
Baby corn + babbage	0.80	27.8	60,000	27,800	87,800	29,300	58,500
Baby corn sole	0.89	-	66,750	-	66,750	23,800	42,950
Best root sole	-	26.7	-	80,100	80,100	21,000	59,100
Cabbage sole	-	29.5	-	29,500	29,500	25,000	4,500

Note : [1] Sale price of baby corn at Rs.75,000/t, best root at Rs.3,000/t, cabbage at Rs.1,000/t. Source (4)

Table 6 : Effect of Planting Techniques on Cabbage Yield, Profitability and Water Use in Cabbage in Hapur, Uttar Pradesh (2005).

Crop establishment methods	Yield t/ha	Cultivation Cost (Rs/ha)	Gross Returns (Rs/ha)	Net Returns (Rs/ha)	Irrigation Water[2] (m^3/ha)
Direct seeding on beds-precision planter	29.5	28.00	59,000	31,000	3,600
Transplanting of seedlings on raised beds	30.0	30,500	60,000	29,500	3,600
Direct seeding on ridges (manual)	24.5	32,000	49,000	17,000	3,900
Transplanting on ridges (traditional)	25.00	32,500	50,000	17,500	3,900

Note : [1] Sale price of cabbage at Rs 2000 per t
[2] Six irrigations were applied and cabbage was planted in 2 rows on 37 cm wide beds at the top
Source (4)

high prices in national capital region. (NCR)

Vegetable and Flower

In the Western U.P. Districts like Ghaziabad, Hapur, Meerut etc. intercropping of vegetable was introduced and very high yield of the total system was obtained **(Tables 4-6)**. Vegetable is very important food ingredient in balance diet and the per capita vegetable, consumption is much below (130 gram) than the needed amount of 300 gram. Thus if this system of farming is adopted, it would help the farmer to harvest higher yield and profit. As a result, availability of vegetable also would be improved **(Tables 3-6)** Like vegetable, the demand of flower is on increase. NCR is the very big market for flowers. Introduction of flower in the cropping system can also result in very high profit **(Table 7)**.

Sugarcane

U.P. is the number one state in sugarcane area and total production in the country but the average productivity of sugarcane is very low in the state (only below 50 t/ha). After independence, a lot of discussion was held in the parliament to shift the sugarcane areas from U.P. to Southern states where the sugarcane yield is much higher (about 100 t/ha). But Western U.P., has many sugar mills and the net profit earned by the farmer from both planted and ratoon crop are quite good. This year (2009-10), the price provided by the mills is as high as Rs.260/q which is much higher than price fixed by the GOI and the yield obtained is also very high (80 t/ha). The gross income per ha would be about Rs.20,8000/ha (BL, 10/03/10). A study conducted in the region indicates that there is a huge gap in yield obtained by the farmers who adopted the best management practices (BMPs)and those who did not **(Table 8)**.

Table 7 : Yield of winter maize with high value intercropping systems in western Uttar Pradesh

Cropping patterns	Yield (t/ha)		Net returns (Rupees/ha)		
	Maize	Intercrop	Maize	Intercrop	System
Maize sole	5.97	0	17,836		17,836
Maize + onion[1]	5.82	3.5	17,001	11,500	28,501
Maize + coriander[1]	3.85	3.2	6,149	29,000	35,149
Maize + potato	4.55	9.5	10,045	26,250	36,295
Maize + tomato	5.97	1.5	17,836	4,000	21,836
Maize+vegetable peas	4.96	2.5	12,271	9,500	21,771
Maize + gladiolus[2]	4.30	18,000.0	8,633	70,000	78,653

Source : Note : [1] Green onion and green leaves,

[2] Number of flowering stems[3]
Source (4)

CONCLUSION

WESTERN U.P. HAS PLAYED A SIGNIFICANT role in agricultural productivity in the country. Potential of this area is much higher than that of what has been harvested so far. The yield obtained by Mr. Chandra Pal is the testimony of this statement, but unfortunately his land is likely to be acquired by the government. Thus the Prime Productive Land would be out of cultivation for ever, though it goes the against the land policy of GOI (NFC, 2007). Mr. Chandra Pal has been benefited by growing the varieties produced by the research institutes and agriculture universities, Management plays a key role in improving the productivity and profit. Intervention through introduction of vegetables and flower can result in much higher yield and profit. For resource poor farmers, growing vegetables and flowers can provide higher employment and income throughout the year.

Government Policies on agriculture, on farmer, including soil health etc. have not influenced the farmer of this area much, because politics and polsonification are economically more attractive than agriculture. Agriculture has no “honour tag” with it. Socially it is considered to be low and it pays very little in marriage market. Farmer in this area is comparatively well off. They don’t need to produce more than what they are producing now for themselves. NFSM (National Food Security Mission) encourages to grow more food including a summer moong. But farmers who can afford to stay at home during unbearable hot summer, do so. It

Table 8 : Fertiliser lApplication (Kg/ha) by Category of Farmers

Plant Crop	Awardee Farmers		Non-Awardee Farmers	
	Average Nutrient (kg/ha)	Average Yield t/ha	Average Nutrient Application (kg/ha)	Average Yield (t/ha)
N	252.1		252.4	
P_2O_5	97.7	137.0	82.8	84.5
K_2O	82.5	(105-173)	51.0	(68-105.0)
Zinc Sulphate	6.7		5.1	
Ratoon				
N	220.86		156.25	
P_2O_5	47.28		42.32	
K_2O	82.5	150.53	51.0	83.13
Zinc Sulphate	2.10	(129-163)	-	(70.0-105.0)

Source (10)

is a national loss, because potential is not being harvested. The farmer is not concerned with that.

The population of USA is about 300 million. In India we have about 300 million people who are quite rich like USA. Therefore, it can be said that India has a USA in it which has to be concerned about the 250 million Indians who are below the poverty line (BPL). If USA, Indian (i.e. 300 million rich Indian) take care of those who are BPL, India would become hunger free country. That would be a great service to humanity. It is easy provided we have kind hearts and firm determination. One USA Indian has to take care of only one BPL Indian.

Our slogan should be "Stop not till the goal is reached". Our salutation to the great sons of India, the Kisan, the *annadata*. "Jai Jawan, Jai Kisan".

FUTURE LINES OF WORK

1. Better management to create weed free environment in the rice-wheat cropping results in higher yield and profit. Therefore, weeds are to be controlled effectively.

2. Introduction of flower and vegetable in the cropping system in Western U.P. can result higher profit. This needs urgent attention.

3. BMPs can results very high yield of sugar cane in U.P. This aspect needs encouragement.

4. We are generally in service to earn money, but love for work is missing. We should develop love for the work and respect for the people (farmer) for whom the work is being done to get the desired result.

5. Unless the farmer knows about the policy formulated for them question of adopting the policy does not arise. Therefore, we should create awareness about the policy and farmers right among the farmers. Productive land acquisition has to be stopped.

6. "There is darkness below the lamp" says the proverb. The farmers belonging to a village only about 25 km from Delhi are not aware of the policy formulated for them. Their soils have never been tested. We should serve them to be served.

7. Now, the political farmers are getting the lion's share of the benefits provided by the government. This is how the poor are becoming poorer and richer are becoming rich. We, the rich Indians should take care of the BPL Indian and the poor farmers.

8. Aruna Roy, an I.A.S., now a Political Activitst, Working in rural areas of Rajasthan, is of the opinion that, we, the rich and so called educated are the cause of the hopeless condition of the poor and BPL Indian. We should therefore, rectify the system ourselves to save the soil, to save the farmer and the nation as well.

9. We are being continuously and silently observed and some one may learn some good thing from us which may change some one's life toward betterment . Therefore, our lives should be a role model to other. Ego is the biggest enemy in our lives. There is a handy tool called meditation which could be gainfully and efficiently used to better the quality of our lives.

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