

# Agriculture Development and Agripreneurship in North-Eastern Region

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## Abstract

*The main objective of this paper is to discuss the constraints of agricultural development and agripreneurship in N.E. region and steps required to enhance the agricultural development and agripreneurship. We have also discussed about the scope of agripreneurship in N.E. region.*

## INTRODUCTION

North-East India is very rich in flora and fauna, very much suitable for horticultural crops. It consists of eight states – Assam, Meghalaya, Manipur, Mizoram, Nagaland, Arunachal-Pradesh, Tripura and Bhutan. Most of the states in this region are economically far behind and deprived in terms of various facilities in comparison to other states of the country. However, all the North-Eastern states are characterized by predominance of agriculture sector. Around 75% of the population depends on agriculture and other related production activities as their principal means of occupation in these states. But the share of agriculture sector in generation of state income is around 50%.

The agriculture sector is extremely backward within overall economy. Because of difference in terrain, geo-physical, agro-climatic and sociological conditions, there is inter-state inequality within the region in respect of agricultural development. It is needless to say that the economic upliftment of the region heavily depends on the development of agriculture sector. Undoubtedly, through the genuine implementation of appropriate measures under a long term well planned agriculture policy and strategy, the region has tremendous potential of achieving a high level of agricultural development commensurate with its good native resources and advantages. However, in order to achieve this goal, various constraints like structural, institutional, technological, educational, sociological etc. regarding the progress of agricultural development have to be properly identified and appropriate policy measures need to be formulated and implemented faithfully.

## CONSTRAINTS OF AGRICULTURAL DEVELOPMENT AND AGRIPRENEURSHIP IN HILLY AREAS

- One of the major constraints towards agricultural development is the predominance of age-old practice of shifting cultivation (jhum cultivation) in hilly regions of the North-East. Because of primitive mode of cultivation, most of the farmers are below threshold level of production providing little opportunity of efficient use of some of the available resources and technologies which may prove to be cost effective. Because of increasing pressure of population the fallow period is shrinking and has come down to 3-4 years which is not sufficient for the recovery of soil fertility. Further, continued Jhum cultivation in the state on mild /steep hill slopes is causing forest destruction and acceleration of soil erosion and consequently the entire eco-system is becoming unstable. Any technological change including settled cultivation will be acceptable to these farmers, provided it assures them more income. It is voluntary acceptance and acceptance through persuasion and not imposition which will bring about sustainable development in these hilly regions.
- The lack of awareness of agripreneurship opportunities, lack of knowledge of various government schemes for funding to agripreneur, lack of technical know-how, lack of training and financial constraints are some of the constraints for development of agripreneurship.
- The extension services of the implementing agencies of area specific development plans for agriculture need complete orientation in terms of creating awareness, disseminating knowledge of technology, seeds, fertilizers, need for soil test, cash crops, settled cultivation etc.

**Table 1: Shifting Cultivation in N.E India**

States	Annual Area Under Shifting Cultivation(sq.m)	Fallow Period (in yrs)	Minimum Area Under Shifting Cultivation one time or other (sq.m)	No. of Families Practicing Shifting Cultivation
Arunachal-Pradesh	900	3-8	2,700	70,000
Assam	1200	2-8	1,600	71,000
Manipur	1100	3-6	4,400	85,000
Mizoram	800	3-4	2,400	64,000
Nagaland	260	4-8	2,600	1,56,000
Tripura	300	4-8	1,500	58,000
Bhutan	150	3-7	600	10,000
Meghalaya	700	4-7	3,500	70,000

- There is lack of coordination among various agencies like the Department soil conservation, the Department of Agriculture, Department of Fishery, Veterinary, Co- operatives, banks etc. involved in implementation of jhum control schemes. Due to this the farmers are at a loss as to what to do, compelling them to continue with jhum cultivation.
- The proper planning and economic feasibility of alternative means of livelihood, i.e. bee keeping, poultry, cattle farming, horticulture etc. were not properly examined before their introduction among shifting cultivators. Proper guidance and assistance from the concerned departments was not given beside proper soil analysis (especially for horticulture).
- Due to a lack of infrastructure facilities like road communication/transportation, irrigation, easy marketing facilities etc, and the entrepreneur farmers were compelled to abandon the cultivation of such crops even with good harvest after initial year. Crops of pineapples, bananas, oranges, quite often gets rotten due to lack of proper transportation and marketing network.
- The expansion of terraced lands in hilly areas of the region enhances the need of good irrigation facilities. Most of the terrace constructed by the government and allotted to jhumias are dry with very little irrigation facilities. Lack of irrigation facilities in settled farming areas throughout the year stands in the way for double/multiple cropping.
- The middlemen exploit the farmers by procuring agriculture products from them in throw away price. The monopolist traders exploit growers of pineapple, potato, banana, orange, cotton, guavas, in a large scale. The root cause of this exploitation is absence of good marketing network near growers and absence of storage facilities, preservation and processing units.
- Absolute lackness of preservation and processing centers is matter of big constraint for agricultural development of this region. Establishment of processing centers for cashewnut, pineapple, potato chips, orange squash, apple juice, jelly and jam, and milk at proper places is the need of hour which would give a big boost to agricultural development in this region.

## STEPS NEEDED TO ENHANCE AGRICULTURAL PRODUCTION AND AGRIPRENEURSHIP

Establishing an agri-trade and developing agripreneurship is mostly not one man activity. It involves multi-pronged activities. Though the answer to the question how to develop agripreneurship in N.E. region lies in the solutions to the problems faced in this regard, yet the followings are some of the measures for developing agripreneurship specially in rural areas.

- Finance is considered as lubricant for setting up and running any agri-industry. In order to get appropriate funding from some bank or other funding agency for any agri-industry, an agripreneur is required to submit viable proposal to the funding agency. Good number of new agripreneurs are not equipped with sufficient training to prepare a viable proposal good enough to earn funding. Therefore, there should be agencies or some units in the funding agencies to assist new entrepreneurs in preparing good proposal. Funds need to be available on time at soft terms and conditions to agripreneurs.
- One peculiarity of agripreneurship is that most of agripreneurs join entrepreneurial career not by choice but by chance or under compulsion. Lack of aptitude, skill and training on the part of new agripreneurs often makes the unit sick. Hence there is need to develop entrepreneurial attitude and required skill among the prospective agripreneurs through Entrepreneurship Development Programmes.

- One effective way to inculcate the agripreneurial attitude may be imparting such education in schools, colleges and universities specially at plus two level and higher. The younger minds are easy to be molded as is evident from the "Kakinada Experiments" in Andhra Pradesh.
- Sometimes the real problem in setting up of agro-industry is not the non-availability of various facilities required, but un-awareness of available facilities. Therefore, the need is to disseminate information about all what is available to provide to the agripreneurs to facilitate them in setting up agro-industry.
- Proper provisions need to be made to impart the institutional training to orient the agripreneurs in specific products and trades so that local resources can be harnessed properly.
- In every block, there should be a proper storing facility and processing unit along with good necessary transportation to facilitate the growers of crops to transport their harvested crops to storing houses/processing units. The government should establish a system of purchasing from the growers their farm produces at minimum support price.
- The government should establish "Haat" at block level, where the farmers and other agripreneurs may bring their products for sale.
- The government/NGO's should try to establish agro-clinic and advisory centre at Block level to assist and advise the farmers and other agripreneurs from time to time as and when they face any problem. A good marketing net work will significantly facilitate the agripreneurs towards the success of their trades.
- The implementation agencies of various plans for agricultural development and entrepreneurship development in this region with special focus on hilly regions must be area specific and must be developed and introduced in consultation with the local farmers and agripreneurs and by taking them into confidence.
- Arrangement for sufficient extension services must be made well in advance.
- Intra-structural facilities, i.e. assured irrigation, proper road transportation, market network, preservation centers, electric supply, processing centers for different agricultural/horticultural produces must be created/enhanced.
- To control the exploitation by the middlemen, the government should fix support price for various farm produces and should buy from farmers/entrepreneurs.
- The shifting cultivators may be encouraged to start with plantation of coffee, rubber, horticultural crops, floriculture, mushroom cultivation etc and in such cases, proper guidance and remunerative alternative means of income be given for intervening period, i.e. up to the time of getting returns from the plantation.
- Agriculture scientists may be requested to evolve new variety of crops suitable for high altitudes/hills which may give high yield.
- Soil test at various places in the region is urgently required. Depending on the report of soil test, farmers/entrepreneurs need to be advised the suitable crops, manure.
- The importance of use of improved tools and implements increases in hilly arrears with the expansion of terrace land. Therefore, agricultural engineers may be requested to develop efficient tools and implements suitable for hilly areas.
- The local youths should be motivated for scientific cultivation and for crops like rubber, coffee, mushroom and other economically profitable crops.

It has been observed that mostly following factors happen to motivate agripreneurs to start enterprise.

- Desire to do something new.
- Desire to be free and independent.
- Desire to do something of his/her own choice rather than to do some job imposed by his/her boss.
- Desire to be job giver rather than job seeker.
- Being ambitious.
- Family background of entrepreneurship.

- Educational background.
- Promising demand for the product.
- Encouragement from big business houses.
- Government assistance and support.

Agripreneurship is not a cup of tea for everyone. Before entering into agripreneurship, one must assess oneself very carefully about one's suitability to become a successful agripreneur. Following are some of the requirements for a successful agripreneur.

- Desire for high achievement.
- Risk taking aptitude
- Desire to be own master rather than to serve under some boss.
- Foresight
- Highly optimistic
- Good organizing ability
- Good planner
- Innovative and imaginative
- Having good insight of agricultural practices and products.
- Good idea of finance
- Good in handling and dealing people
- Good communication skill
- Hard working

### SCOPE OF AGRIPRENEURSHIP IN N.E. REGION

Assured job in government sector has practically dried up and private sector aims to take only bright, smart, skilled, and very hard working youth. As a result, for more than 80% of educated youth, practically there is no job. With production of large number of graduates in traditional disciplines and with very limited job opportunity every year, the army of unemployed educated youths is expanding day by day. The scenario is equally bad among educated tribals in this region. This is bringing frustration among educated youths and some of them get trapped to wrong path of unlawful activities including taking drugs.

The need of the hour is to encourage youths to become entrepreneurs. For this more and more skill and entrepreneurship oriented courses should be run by colleges so that youths are equipped with required skill needed for self-employment. Some of these courses may be run as add on courses. Since 75% of population in North-East Region is depending on agriculture, it is required to encourage our youths to go for agripreneurship. There is tremendous scope for agripreneurship in this region. Commercial floriculture, food preservation and processing, farming of cash crops, marketing of agri-products, vermi-compost, dairy, fishery, piggery, poultry, agro-clinic, bamboo based unit, mushroom cultivation, soya milk unit, cashew nut production, cultivation of aromatic and medicinal plants and their processing, juice bars, ice cream units etc. are some of the businesses which can be taken up by agripreneurs. The scope of these businesses for any sincere agripreneur is very high with good profitability and involving not very high cost.

Some agripreneurs tried in some of the business in this region, only few have been successful, while most of them were not successful, as they did not do enough ground work and were not equipped with proper knowledge and skill to make the business successful. In order to spread the culture of agripreneurship in this region, it is very essential to go for very aggressive campaign for agripreneurship. In my opinion all such departments along with leading NGO's and entrepreneurs of the region involved with the development of this region should have a joint meeting, find out the bottle necks for rural development and for entrepreneurship and chalk out a joint action plan phase-wise with a clear-cut road

map of implementation of action plan. The joint committee should meet at least twice a year to assess the pace of implementation and to remove the obstruction if any, in implementation of the action plan.

I also feel that there should be counselling cell in each block having real experts. The cell should organize counselling camp periodically in different schools at plus two level to test the aptitude of students and advise them the possible avenues of self-employment and the type of skill development/training suitable for such avenues. In this way we may be able to divert youth energy in a proper constructive way rather than letting them go for B.A/M.A. without any aim and goal and further in producing army of unemployed educated youth.

North Eastern region, particularly, Meghalaya is paradise of natural resources. We need to tap these resources for economic development of the region. For this, in addition to government organizations, non-government organization and agripreneurs should be encouraged for the challenging job of tapping resources available in this region.

We need to change the mind set of youth, which has been that objective of education is only to get some assured job in government/private sector. With the drying up of assured government jobs, most of the educated youths do not have much choice other than going for self employment. Strategically also N.E region is a location in the country conducive for international trades, as it shares its boundary with many Asian countries including some Asian giants. With the coming up of Look East Policy, the scope of international trade and agripreneurship has become very high. So far, we are not able to exploit this advantage.

I am of the firm opinion that if the natural resources available in the region and international trade are exploited properly in an aggressive manner, N.E. Region can become one of the most prosperous parts of the country. Some of the possible areas of export from N.E Region can be agro-food processing based products including cashew nut, spice like ginger, cardamom, jute product, bamboo based products, silk and handloom based products, tourism and eco-friendly handicrafts etc.

We have surplus production of bamboo, oranges, pineapple, turmeric, cashew nut, ginger, cardamom, jackfruit, banana etc. But our farmers get much below than due price for these products due to lack of food processing/value addition units, proper marketing network and transportation facilities. We need to create awareness amongst our youth about abundant potential of agripreneurship in this region, train them with required skill, provide them with necessary information about various schemes of funding for self-employment, market survey, place of availability of raw material required, preparation of proper project to get financial assistance from various funding agencies and marketing facility.

It is heartening to see that NEDFI is playing a key role in providing marketing facility through NEDFI Haat. I.I.E, DIC and SSI are also running frequently various need based programmes including entrepreneurship development programme, agripreneurship development programme with an objective to expose the potential agripreneurs to practical training on selected trades with required agripreneurship inputs and extending incubation support to serious agripreneurs for enabling them to set up their own enterprises and providing them required information and support for value addition/marketing. I.I.E could promote this programme in Assam, Mizoram, Sikkim, and Arunachal Pradesh, but not so far in Meghalaya and other N. E. states. Cluster development programme is also being initiated at some places in Nagaland and Manipur.

Inspite of efforts of IIE, KVIC, NEDFI, NABARD, DIC, SSI and other such agencies, the impact on agripreneurship is not much. A lot more concerted, aggressive and joint effort is the need of hour to have a significant impact on entrepreneurship especially on agripreneurship in N.E. region which in turn will help in furthering development of N.E. region

The following tables give a picture of state-wise estimated problem area of soil, percentage of irrigated area, annual average growth rate of population verses production of food grains and availability of food grains per capita per day.

**Table 2: State-Wise Estimated Total Problem Area. Area Treated and Balance Area yet to be Treated**

(Area in Lakh Hectare)

State	Total Problem Soil Erosion	Area due to Land Degradation	Total Problem	Area Treated till end 1993-94	Balance yet to be Treated
Arunachal Pradesh	115.02	7.29	122.31	13.59	108.72
Assam	22.17	7.82	29.99	2.30	27.69
Manipur	3.74	3.60	7.34	1.16	6.18
Meghalaya	8.37	2.65	11.02	1.23	9.79
Mizoram	4.21	1.89	6.10	0.22	5.88
Nagaland	4.05	6.33	10.38	1.06	9.32
Tripura	1.67	1.12	2.79	1.59	1.20
North East	159.23	30.70	189.93	21.15	168.78
India	1234.47	455.55	1690.02*	373.60	1316.42*

- Coastal Sandy-Area and Acid Soil is not included.

Source: Indian Agriculture in brief. 26<sup>th</sup> Edn. 1995, Dept. of Agriculture and Cooperation, Govt. of India.

**Table 3: Percentage of Irrigated Area to Total Area**

State	Total Cereals	Total Pulses	Total Food Grains
Assam	20.11	5.00	19.46
Arunachal Pradesh	19.41	-	18.64
Manipur	43.35	-	43.35
Meghalaya	34.88	-	34.09
Mizoram	6.85	-	6.49
Nagaland	34.04	-	32.00
Tripura	17.49	20.00	17.58
All India	47.02	12.69	40.64

Source: Ibid

**Table 4: Annual Average Growth Rate of Population and Production of Food Grains in the N-E States and all India**

States	Population	1980-90 Production	Population	1991-99 Production
Assam	1.5	1.3	1.2	1.5
Arunachal Pradesh	3.1	4.2	3.1	-1.8
Manipur	2.6	-1.7	2.5	2.2
Meghalaya	2.8	-0.4	2.8	2.0
Mizoram	3.4	8.3	3.3	7.4
Nagaland	4.3	3.7	4.4	4.5
Tripura	3.4	1.2	2.9	0.2
All India	2.1	1.8	1.9	1.8

**Table 5: Availability of Food Grains per Capita per Day (in Grams)**

Year	Assam	Manipur	Meghalaya	Nagaland	Mizoram	Tripura	Arunachal Pradesh	All India
1983	372.88	421.44	297.63	396.52	179.57	538.56	569.75	493.60
1984	359.91	473.94	307.56	339.04	154.09	472.35	858.43	568.36
1985	350.61	600.58	292.72	366.29	228.15	449.25	886.62	531.36
1986	393.16	588.57	296.62	333.36	234.26	430.44	700.23	537.72
1987	331.77	428.65	227.08	252.53	239.73	436.16	671.78	502.01
1988	367.25	461.00	239.21	256.81	237.55	479.93	675.42	481.14
1989	329.02	451.82	225.98	383.29	277.31	493.39	666.06	570.65
1990	365.04	397.83	389.82	424.38	283.39	482.84	684.71	562.81
1991	420.69	425.91	238.35	438.75	323.72	512.73	692.41	567.41
1992	408.51	508.86	233.02	441.09	346.50	469.56	675.03	531.57
1993	411.41	392.97	211.76	473.89	389.35	426.60	578.59	556.32
1994	416.92	492.35	211.78	451.87	433.68	463.04	669.18	560.98
1995	406.64	657.63	297.03	416.08	433.66	376.55	504.06	572.76
1996	410.14	444.48	191.38	432.95	415.71	409.09	551.29	530.35
1997	401.95	499.42	232.10	468.15	434.87	462.97	540.31	576.37
1998	420.30	454.49	236.10	392.91	419.63	442.48	533.81	542.52
1999	381.58	476.35	228.99	445.60	424.38	395.25	463.33	563.84

Source: Census of India- 1981, 1991. Economic Survey- various issues

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