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Historical Policies and Programmes Aimed At Replacing Shifting Cultivation

By

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Abstract

For centuries, Nagaland's agrarian communities have practiced shifting cultivation known as "jhum." As global sustainability paradigms shift, transitioning from jhum becomes vital. This study evaluates jhum's historical trajectory, considering socio-cultural, ecological, and economic facets. This research highlights challenges and opportunities by providing a holistic view of jhum's resilience and Nagaland's agricultural future.

Keywords: Shifting cultivation, Jhum, Nagaland, Sustainability, Agricultural policy

Introduction

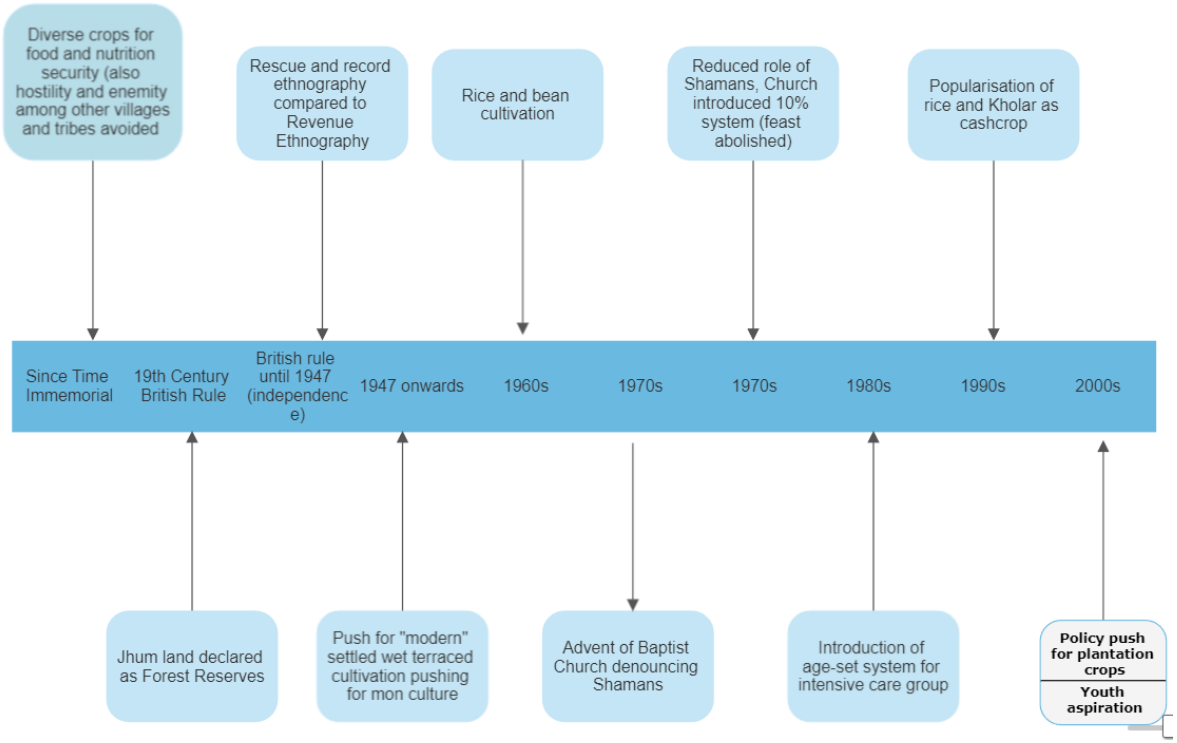
The schemes to promote agro-forestry has largely ignored the peculiarities and importance of local species; the push has been on species such as **"**pineapple, banana, plum, apricot, peach, pear and apple growing; cash crops such as citronella, broom grass, areca nut, spices (cardamom, pepper, ginger), tea, coffee, cashew nut and rubber". Another push currently is on promotion of green revolution technologies in upland agriculture, which can adversely affect the fragile eco-system of the state (Behera, Nayak, Andersen, & Maren, 2015) and (Choudhury & Sundriyal, 2003).

The policy planning generally keeps the traditional practices and customs at disdain, and therefore, to replace the jhum a model was failure. There have been sectoral planning and there has not been coordinated efforts (Choudhury & Sundriyal, 2003) and (Sharma A. , 2013).

Many attempts have been made to introduce agri-horti-silvipastoral systems through government and civil society organisations (CSOs) in lands where the slopes are beyond 80%. In this system settled cultivation is done at the foothills, horticulture at the middle and silvipasture at the higher altitude. Several measures[1] for land husbandry is done to arrest loss

[1] Terraces, bunds, and grass plantation

of soil and water similar to the Zabo system of Chakesangs (Sharma U. , 2002) and (Verma, Satapathy, Singh, Singh, & Dutta, 2001).



The policy planning generally keeps the traditional practices and customs at disdain, and therefore, to replace the jhum a model was aailure (Choudhury & Sundriyal, 2003).

Difficult terrain, planning without contextualising the local needs, non accountability of the stakeholders, lack of synergy in developmental targets and security needs has led to chronic underdevelopment. The naturally blessed region can be substantially developed by increasing the income of rural dwellers with harnessing the rich natural endowments (Choudhury & Sundriyal, 2003) and (Datta, et al., 2007)

Choudhury & Sundriyal (2003) argue that the shortening up jhum cycle already has led to negative impacts, yet any technology which is not based on indigenous knowledge must be tested to suit the context of Nagaland (Choudhury & Sundriyal, 2003).

Shift to cash crops: There has been a pressure on the traditional systems of crop production to feed increasing population, and hence reasoning has developed to shift to cash cropping. The modern system in NE region is promoted to curb the jhuming practices aided by subsidies, modern methods, and high capital investment. There is a lack of such prerequisites in most of the NE region, owing to poverty, remoteness, low stability of cash-crop prices, limited processing of produce, and small-scale production due to small and marginal land holdings (Behera, Nayak, Andersen, & Maren, 2015) and (Choudhury & Sundriyal, 2003).

Food market and price volatility: According to (Behera, Nayak, Andersen, & Maren, 2015) the shift from jhum to cash crop systems has not ensured food security and dietary diversity and quality. He argues that the food markets are not properly organised, are scattered, have scarce commodities, poor infrastructure, and linkages among each other. There is an issue of price volatility, poor socio-economic development (though he has not described the indicators), and a close correlation with food security. He advocates for a further study to

understand the net impacts of agricultural commercialisation to fill the knowledge gap (Behera, Nayak, Andersen, & Maren, 2015).

Although some farmers do innovative mixed cropping to increase food production, in the land available to them (i.e. jhum, fallow land, and home garden), the cost of procurement for traders and the low scale makes in commercially unviable, and this distress grossly undervalues the produce. In such upland scenario, timber logging is the only viable employment opportunity for food security

There are no avenues of processing and value additions as the produce are perishable, resulting in wastage and diminished value at the local markets. The transportation costs are very high; poor communication infrastructure, low number of trade agents, and lack of assured minimum support prices (MSP) has rendered the agro-forestry sector into a loss making venture and farmers unable recover the investment, forcing them to revert to jhum (Choudhury & Sundriyal, 2003) and (Behera, Nayak, Andersen, & Maren, 2015).

Understanding the Reasons Behind Limited Success

Divergent approaches by Central and state Government (ministries and departments), implying confusion among jhum farmers," Shifting cultivation fallows must be legally recognised and classified as "regenerating fallows," which, given enough time, may regenerate into secondary forests. Potential to increase forest cover. Need for a "landscape" / "systems" approach which links various farm livelihoods activities (NITI Aayog, 2018).

The Forest Policy (1988) considers jhum lands as forest land and it discourages shifting cultivation.

The schemes (including push for green revolution) to replace shifting cultivation has largely ignored the peculiarities and importance of local species; the push for cash crops failed due to improper market linkage, impacting food security (dietary diversity).

The policy planning generally keeps the traditional practices and customs at disdain; therefore, replacing the jhum a model was a failure. There have been sectoral planning and there has not been coordinated efforts

The schems have aided by subsidies, modern methods, and high capital investment. Lack of such prerequisites owing to poverty, tenurial security, remoteness, low stability of cash-crop prices, unorganized markets, poor infrastructure, limited processing of produce, and small-scale production due to small and marginal land holdings

Alternative cultivation systems are more dependent on external input system, not assuring better yields. Local food habits are not suited to the monocropping nature of settled agriculture.

This chapter delves into understanding why policies and programs instituted to facilitate this transition have not found widespread success.

Historical Overview of Policies and Schemes

Several policies and schemes were implemented between 1981 and 2021, aiming to curtail shifting cultivation and promote settled agriculture:

Year(s)	Scheme/Policy	Objective	Challenges	Notes	Progress	Implication on Production System
1981-1991, Restarted in 2014	NPCDC and Coffee Board	Discouraging shifting cultivation and encouraging high-value cash crops	Inadequate facilities, training gaps; Long gestation period for coffee	Focus on rubber plantations; Long-term coffee plantation strategy	Abandoned, restarted with varied production	Limited market access, adverse price margins
1995-2006	NEPED	Introduce agroforestry	Limited market linkages	Joint initiative with ICEF	Customary rights emphasized	Holistic agroforestry practices
1995-2012	WDPSCA	Prohibition of jhum, assistance of Rs 10,000/ha	Geographical diversity	Uniform watershed management	Full assistance provided by the central government	Transition from jhum to settled practices
2005-06	Central Institute of Horticulture	Technological inputs, training, seed quality	Topographical misalignment	Technological and training support	Horticulture promotion	Emphasis on non-food grain plantation
2009-onwards	IWMP	Soil and water conservation for sustainable agriculture	Implementation hurdles, local resistance	National program adapted to Nagaland's context	Several watersheds identified and developed	Direct emphasis on reducing jhum cultivation
2017-18	NFMP	Improve the forest ecosystem, support income generation	Community mobilization	Community-led approach	-	Reinforcing sustainable forestry
2021	GoN directives	Emphasis on modern agricultural practices	Implementation challenges	Pro-sustainability agriculture practices	-	Holistic agricultural reforms

Primary Data Analysis and Implications

To substantiate the analysis, primary data was gathered, focusing on soil health, farmer-extension officer interactions, and economic returns.

Table 4.1: *Comparative Soil Analysis across Districts*

District	Organic Carbon (%)	Nitrogen (%)	Potassium (%)
Dimapur	1.2	0.15	150
Kohima	1.1	0.14	140
Zunheboto	1.3	0.16	155
Mokokchung	1.2	0.15	148

Inference: Marked decrease in organic matter indicates potential long-term degradation from settled cultivation.

Table 4.2: *Farmer-Extension Officer Interaction Frequency*

District	Never Interacted (%)	Occasionally (%)	Regularly (%)
Dimapur	42	30	28
Kohima	45	28	27
Zunheboto	40	32	28
Mokokchung	41	31	28

Inference: Many farmers have little to no interaction with extension officers, suggesting gaps in policy outreach.

Table 4.3: *Comparative Economic Returns (in INR/acre)*

District	Jhum (INR)	Settled Cultivation (INR)
Dimapur	24,000	21,750
Kohima	24,750	22,125
Zunheboto	23,625	21,600
Mokokchung	24,150	21,825

Inference: Jhum cultivation offers higher immediate returns than settled cultivation, potentially influencing farmer preferences.

Critical Analysis and Inferences

Socio-cultural Dynamics:

Jhum is deeply embedded in the cultural ethos of Nagaland. Any policy intervention should be cognizant of these ties. The community initiatives, like NEPED, appeared to be more successful. This underscores the importance of an inclusive approach when attempting to alter age-old agricultural practices deeply embedded in a region's cultural and socio-economic fabric.

Ecological Constraints:

Nagaland's unique topographical and soil health conditions make it challenging to have a blanket policy approach.

Economic and Institutional Realities

The appeal of immediate financial gains from jhum versus settled agriculture is significant. Additionally, the low interaction rates with agricultural extension officers highlight institutional challenges. Economic factors, such as providing a robust market for produce or ensuring favourable price margins for producers, were often overlooked. A shift from traditional farming methods to newer methods must be economically viable for the farmers.

Holistic Approaches Needed:

One of the main reasons for the limited success of these initiatives seems to be a focus on isolated aspects of the issue rather than a comprehensive approach. For instance, promoting cash crops without ensuring a robust market linkage and favorable price margins results in limited on-ground impact.

Geographical and Topographical Concerns:

Nagaland's unique geographical conditions often posed challenges for the successful implementation of generic national-level schemes. Tailored interventions, cognizant of local terrain and culture, are more likely to succeed.

Implementation Lags:

Several schemes witnessed lags in implementation, potentially due to bureaucratic delays or inadequate infrastructural support. Rapid execution and continuous monitoring are crucial for the success of such initiatives.

Sustainable Approach:

The emphasis, in recent years, has shifted towards a more sustainable approach, considering both the environment and the socio-economic aspects. This trend is positive, aiming at holistic development rather than replacing cultivation methods.

Conclusion

Understanding the sustainability of shifting cultivation in Nagaland requires a multi-faceted approach that marries the region's socio-cultural, ecological, and economic realities. A balance between traditional practices, ecological sustainability, and economic feasibility is paramount for effective policy outcomes. A future-focused, holistic, and community-driven approach seems to be the way forward.

Bibliography

Behera, R. N., Nayak, D. K., Andersen, P., & Maren, I. E. (2015, August 9). From jhum to broom: Agricultural land-use change and food security implications on the Meghalaya Plateau, India. Ambio, 45(2016), 63-77.

Choudhury, D., & Sundriyal, R. (2003). Factors contributing to the marginalization of shifting cultivation in north-east India: micro-scale issues. Outlook in Agriculture, 32(1), 17-28. doi:10.5367/00000000310129422

Datta, K., Mandal, S., Tripathi, A., Singh, S., Verma, M., & Mohanty, S. (2007, August). Retrospect and Prospect of Food Security in North Eastern Hilly Region of India. 37-49.

Sharma, A. (2013). Trends of area, production and productivity of foodgrain in the north eastern states of India. Indian J. Agric. Res., 47(4), 341-346.

Sharma, U. (2002). Managing the fragile hydrological ecosystem of the northeast hilly region of India for resource conservation and improved productivity. (pp. 357-364). Cape Town, South Africa: FRIEND Conference.

Verma, N., Satapathy, K., Singh, R., Singh, J., & Dutta, K. (2001). Shifting agriculture and alternative farming systems. In N. Verma, & B. Bhatt (Eds.), Steps towards modernization of agriculture (pp. 345-364). Meghalaya, India: ICAR.