



INTERNATIONAL RESEARCH JOURNAL OF HUMANITIES AND INTERDISCIPLINARY STUDIES

(Peer-reviewed, Refereed, Indexed & Open Access Journal)

DOI : 03.2021-11278686

ISSN : 2582-8568

IMPACT FACTOR : 5.828 (SJIF 2022)

A HISTORICAL VIEW OF ECOLOGY OF HARYANA

Vinod Kumar

Assistant Professor,
Govt. College for Women Tosham,
Bhiwani (Haryana, India)

Dr. Virender Singh

Extension Lecturer,
Govt. College for Women Tosham,
Bhiwani (Haryana, India)

DOI No. **03.2021-11278686** DOI Link :: <https://doi-ds.org/doi/10.2022-18824691/IRJHIS2207022>

Abstract:

It could be called attention to that the predominant natural issues are not only the result of advancement today. These might be inborn in the idea of the area or might have developed generally after some time and must be deciphered in three kinds. To start with, which existed from the very outset as a piece of the actual arrangement of the area, like the subsurface saltiness of water in Haryana? Besides, which advanced over the long run by virtue of the cooperation between man and nature? For instance, deforestation during the frontier time causes soil disintegration on the Shiwalik slope and the Aravalli exceptions. At long last, the biology of an area might have been complemented by a speed increase in the speed of the advancement cycle. Quarrying close to the modern communities in Haryana causes water/air contamination. The present paper presents a historical view of the ecology of Haryana in terms of descriptive manner.

Keywords: History, Ecology, Development

Introduction:

It becomes important to take note of the biological history of Haryana from a spatial and fleeting point of view. For the comfort of conversation, the biological history is coordinated into three periods:- the pre-provincial (before when the British took over Haryana), the pilgrim (British period to freedom, 1947) and the post-frontier time frame (1947-1966), when India became autonomous.

Pre Colonial View:

However Haryana state arose on the political guide of India on first November 1966, the locale has been notable in history since old times, just like the support of Indian culture of farming. The destiny of the historical backdrop of Haryana has likewise been chosen over and over on its dirt. The environment of Haryana has a long history. The pre-provincial perspective on the nature of Haryana has separated into three periods:-

1. **Pre-Harappan period:** The biological perspective on the pre-Harappan period began from

the second thousand years B.C. since the Aryans occupied this region, the pillar of its economy has forever been agribusiness and creature cultivation through the ages. Rig-Veda, the earliest recorded writing of the Aryans, was made by her. Archeological smidgens of proof uncover that agribusiness was being polished in this district sooner than in the Harappan culture (Haryana State Gazetteer: 21)

In antiquated days, the locale of Haryana had many timberlands. The VamanPuran records seven Vanas or woodlands: Kamyak-vana, Madhu-vana, and Sita-vana. It likewise contains seven waterways of this area viz. Saraswati, Drisadawati, Vaitarni, Apaya, Amshumati, Kaushiki and Hirnyawati. It implies in old times Haryana was a biologically evolved locale. The Imperial gazetteer of India (vol. xiii) records that the word Haryana is likely gotten from Hariyalban or the place that is known for green woodlands and is suggestive of the old time when this region was a rich and ripe plot.

Since the disclosure of farming by man, it has been the wellspring of interminable creation on which human development depends. The Neolithic man figured out how to control and involve fire and got traction in the woods. He imagined the whee, iron, hatchet, furrow offer and creature power for farming improvement which made it workable for him to live in chosen regions, framing a general public and growing a huge piece of his food almost. In any case, this prompted climate alteration (Randhawa, 1980: 3-4)

The Vedic Aryans seem to have had huge backwoods available to them for getting lumber, plants and spices. Around then, the rancher's occupation was helped in high regard. Horticulture mostly relied on the blessings of protection, the God of downpours. There are references likewise to the master's abilities in raising yields (Aiyer, 1952: 42-46).

After the Aryans, the Kurus sent off an aggressive arrangement to recover the immense district of the Saraswati valley for rural purposes to reinforce their financial and political power. The farming thriving was established on otherworldliness in Haryana.

2. Harappan period: Harappan civilization is viewed as quite possibly of the most seasoned living civilization on the planet. Haryana has a rich tradition of economical biology as well as farming turn of events, in view of the essential area of the locale and the insight of its kin, who confronted consistently nature-made as well as man-made catastrophes like dry spells, starvations and different troubles. The rich nature began to debase.

In light of the accessible archaeological and abstract sources, the current history of farming in Haryana gives witnesses just wide holes, which are yet to be filled in by antiquarians. The unearthings and investigations directed in the area by archaeologists have uncovered that the town of Siswal in the Hisar locale, was quick to be involved in agrarian networks as soon as 2500 B.C. (Suraj Bhan, 1977).

During this period, in Haryana, the expanded creation of food grain and other agrarian

products came about mostly by cutting wildernesses. It caused significant deforestation and wrecking floods (Haryana State Gajatteer: 22-33)

3. Post-Harappan period: This period is an intriguing and crucial connection between the rural turn of events and the harm to nature. Thusly, counterfeit water systems came to be polished with the assistance of wells and tanks in the area (Banerjee, 1967).

Wells around then were simply openings in the ground where the water table was two to six meters down. Further away from the streams, where the water profundity went down to 7 to 21 meters, wells with brickwork lining were found (Trevaskis, 1928: 9-11)

The water system got a lift around the thirteenth century A.D. at the point when the Persian wheel turned out to be progressively well known in Punjab (Habib, 1969). Around then, while the Muslim populace was for the most part bound to towns and urban areas, the towns were occupied by Hindu landholders. Whenever there was a progressive ruler with compassion and a strong fascination with the turners of the dirt and the improvement of farming, the economy worked yet made harm the woods and the untamed life (Randhawa, 1982).

During the hour of the Sultans, Firoj-Shah Tughlaq, who controlled India from 1351 A.D. to 1388 A.D. involved a recognized sport in the chronicles of the historical backdrop of horticultural improvement which proclaimed another period in farming success of Haryana. He was the principal Sultan who went to considerable lengths in figuring out the techniques for recovery of the desert for farming creation in his domain. For this, he began the plans of the fake water system and got uncovered five channels. Extraordinary game plans were made for the use of the water (Banerjee, 1967: 295-300). In any case, woodlands during the hour of the rulers were more far-reaching than at the hour of the Mughals (Nijjar, 1968: 124).

Akbar, the extraordinary, designated Todalmal as income serve and used his administrations for land changes. Akbar trained his authorities to give seed and cash ahead of time to the cultivators. But since the farming improvement at the hour of Akbar, deforestation occurred and catastrophes like floods and dry season happened (Randhawa, 1982, 203-208).

Intermittent yet customary intrusions from the northwest antagonistically affected biology. The related unsettling influences constrained individuals to take cover aloof lots. A reasonable illustration of this is given by the disorder and unrest in Haryana and Punjab during the eighteen hundred years. Individuals stayed in timberlands. A few new regions were opened up for development. The joined impact of these two elements harmed the backwoods and the natural life (Gupta, 1952: 28).

Other than the human effect, natural changes occurred because of the inception of a period of parching. The southern pieces of the area were impacted specifically. A few remains are tracked down along the dry bed of Ghaggar River along the southern limit (Brar, 1999:33)

Accordingly, we see that the effect on the climate during this period occurred in three phases; Pre-Harappan period, Harappan Period and Post-Harappan period. In the pre-Harappan period, there was little harm to the environment. Be that as it may, after the improvement of farming and because of nature itself, floods and dry seasons harmed the biology of the district. This period affected the climate looking like deforestation. This was primarily for the augmentation of cultivable land. Most importantly, a period of parching, related to an adjustment to the environment and changes in the stream directions, was likewise answerable for making harm the nature of Haryana. In any case, this large number of changes were spread over an extensive stretch of time, beginning from the Vedic time frame, trailed by the Harappan human progress to the Mughals time frame and their impact was not even close to emotional. Populace development was slow and had not begun applying its tension.

The Colonial Period:

What is available day Haryana, which comprised the south-eastern piece of Punjab in the Colonial period, stayed one of the regressive and immature areas of Punjab under the British. This locale was seen principally as appropriate for the stockpile of the draft creatures to the remainder of Punjab, as likewise to specific different pieces of India. The decided endeavours of the British to hold it as such are reflected in their irrigational strategies, accentuation of low-esteem food-cum grub crops, expanding land under grain development and in their endeavours to control the restricted endeavours being made at the replacement of feed crops by different yields, which could unfavourably influence this locale's steers abundance (Choudhary, 1986). In any case, the period saw a presentation of somewhat cutting-edge innovation. Broad channel frameworks were raised and the farming boondocks expanded. There was more prominent wood for development and as a modern fuel.

New farming executes, innovation, seed assortments and a few new yields were presented and horticulture helped in the pilgrim period (Imperial Gazetteer, 33).

Haryana was fairly in reverse from 1858 to 1947. This subregion was additionally found away from the enduring waterways. Punjab and the stream Jamunascoarse were along the eastern limit of the state. The non-perpetual stream Ghaggar, which went through the northern pieces of this area, made impressive yearly harm to agribusiness. Precipitation was low and flighty, and in the pinnacle period, July to September, there were much of the time early nearby and broad floods. The water system through wells was very restricted (Singh, 2012).

Irrigation system:

After their colonization of Haryana, the British followed a strategy of fast farming turn events. The Channel water system was an essential contribution for that reason. But since of the less precipitation locale, they found it hard to foster a water system in Haryana.

In any case, the farming geology of the south-eastern area included various types of water

assets like channels, wells, lakes and tanks. The place that is known for this locale was to a great extent reliant upon the normal element of the water system for example precipitation (Singh, 2001).

The presentation of the trench water system has a two-overlap impact:- 1. It expanded developed land to the detriment of the woods land and; 2. It caused water logging and saltiness (Darling, 1947).

The western Yamuna channel taken from the stream Yamuna was built in 1335 A.D. during the Firoj-Shah-Tughlaq rule, however, it quit streaming in 1750 because of unreasonable siltation. In any case, in the British or pioneer period in 1817, the channel was reestablished. The starvation of 1832-33 prompted the displaying of the trench and the development of the weir of the Yamuna at Tajewala was built during 1875-79. The Sirsa branch, the biggest of part of the western Yamuna trench was built during 1889-1895. The framework was widely redesigned and stretched out during 1940-43. This caused water logging and saltiness in certain areas of Haryana during the frontier time frame.

Forest Cover:

A rehashed reference has been made to the slow evacuation of wood cover in Haryana over the nations. It was especially during the British decision that regular assets were opened to quick double-dealing to serve modern human progress. The mutual command over the timberland was supplanted by state control. The timberland abundance was taken advantage of in a non-manageable way (Singh, 1998).

Remarkable elements prompting deforestation in the provincial days appeared differently in relation to deforestation during the pre-frontier time frame. In the pre-pilgrim period, it was war and strife which were the reasons for the deficiency of timberlands; in the frontier period, it was harmony which prompted the freedom of a few forested pockets for farming, industry and development (Brar, 1999).

This, thus, increased strain on the farming areas and instigated infringement on woodlands. The development of trenches additionally required freedom of the forest pockets.

References:

1. Al-Saleh, M.A. (1992). "Declining ground water level of Minjuracqifer, Tebrak area. Saudi Arabia. The Geographical Journal. 158: 215-222.
2. Aiyer, A.k. (1952). "Agriclture and allied arts in Vedic India". Bombay. 42-46.
3. Banerjee, J.M. (1967). "History of FirojshahTughalaq". Delhi. 118-128.
4. Bhalla, P. (2007). "Impact of declining groundwater levels on acreage allocation in Haryana". Economic and Political weekly. 2702-2707.
5. Bhan, S. (1950). "The prehistoric settlements in Haryana". ITAS Shimla. Seminar-proceedings. Vol I: 157-158.

6. Bidwai, P. (1988). "Indian agriculture in trouble: consequences of Green Revolution". The Times of India, New Delhi. Monday, February 22: 6.
7. Borlaug, N.E. (1970). "The Green Revolution and the Road Ahead". Speech. Oslo.
8. Brar, K.K.(1999). "Green Revolution: Ecological Implications". Dominant publication. Ed, 1. New delhi. 33-34.
9. Brar, S.P.S. and Singh, B. (1986). "Changes in soil fertility under intensive cultivation". Indian journal of Ecology. 13: 152-157.
10. Chandler, R.F. (1976). "The physical and biological potentials and constraints in meeting world food needs". Proceedings of the world Food Conference. Iowa. U.S.A.
11. Chowdhary, P. (1986). "The advantages of backwardness: colonial policy and agriculture in Haryana". The Indian economic and social historic review. 23(3): 263-288.
12. Conway, G.R. and Barbier, E.B. (1988). "After the Green Revolution", Futures. 20: 651-670.
13. Darling, M. (1947). "The Punjab peasant in prosperity and debt". London: Oxford university press: 105-128.
14. Dhaliwal, S. (2007). The Tribune. New Delhi. Thursday. April 26, 2007.
15. Datta, S.K. and Tauro, A.C. (1968). "Effect of plant type and nitrogen level on growth characteristics and grain yield of indica in the tropics". Agron. 60(6): 643-647.
16. Fernando, V. and Thomas, M.P. (1978). "An assessment of the ecological implications of new varieties of seeds". International journal of Environmental Studies. 12:289-293.
17. Fischer, R. A. and Edmeades, E. O. (2009). "Can Technology Deliver on the Yield Challenge to 2050". Expert Meeting on How to Feed the World (Food and Agriculture Organization of the United Nations).
18. Gaud, W.S. (1968). "The Green Revolution: Accomplishments and Apprehensions". AgBioWorld. Retrieved 8 August 2011.
19. Gupta, H.R. (1952). "A history of Sikhs". I. Simla. Minerva book shop.
20. Gupta, S.L. (1971). "The cropping pattern of Haryana". Geographical review of India. 33: 23-55.
21. Habib, I. (1969). "Medieval India, Proceedings of Indian history congress". Varanasi. presidential address. 139-161.
22. Haryana state gazetteer. "History of agriculture". Vol, II: 22-23.
23. Haryana (<http://www.britannica.com/ebc/article-9111200>) Britannica Online Encyclopedia.
24. Hazell, P. (2009). "The Asian Green Revolution". IFPRI Discussion Paper (Intl Food Policy Res Inst). GGKEY:HS2UT4LADZD.
25. Imperial gajetteer of India. Vol II. 22-23.
26. Imperial gajetteer of India. Vol XIII. 67-68.

27. Inderjeet (2001). "Water resource management". Manisha Publications. New Delhi.
28. Kang, D.S. (1982). "Environmental problems of the Green Revolution with a focus on Punjab, India". in Richard Barrett ed. International Dimensions of the Environmental Crisis. Colorado: Westview press.
29. Kathpal, T.S. and Kumari, B. (1998). "Pesticidal contamination Environment, its implications and Management". Ecological Agriculture and Sustainable development. 2: 535-551.
30. Kumar, R., Pasricha, N.S., 1999. "Land use and land cover changes in the Indus plains of Punjab in the post Green Revolution period 1965–1995". In: Proceedings of the International Seminar on Historical Perspectives of Land-use/Land-cover Change in South Asia for the Study of Global Change, April 11–13, 1999. NPL, New Delhi.
31. Millar, C.E; Turk, L.M. and Foth, H.D. (1958). "Fundamental of Soil Science. New York: John Wiley and Sons: 325.
32. Mitra, N. (1988). "The price of the Green Revolution: ground water reserves". Sunday. 21-27 february: 61-63.
33. Nace, R.L. (1970). "Human use of ground water in R.J. Chorley (ed.) Water, Earth and Men. Land Menthen Publishing: 285-293.
34. Nadkarni, M.V. (1987). "Agricultural development and Ecology: an Ecnomists view". Indian journal of Agricultural Economics.42: 3.
35. Nayyar, V.K. (1983). "Manganese deficiency in Punjab Soils". Progressive Farming.19: 18-19.
36. Nijjar, B.S. (1968). "Punjab under the sultans (1000-1526 A.D)". Delhi. Sterling.
37. Patrick, B. (2007). "Feeding Billions, A Grain at a Time". The Wall Street Journal: A1.
38. Powell, B. (1988). "Indian village community". Reprint. London longmans.
39. Piggot, S. (1950). "Prehistoric India". London: cassell.
40. Pingali, P. "Green Revolution: Impacts, limits, and the path ahead". Bill & Melinda Gates Foundation, Agricultural Development. Harvard University, Cambridge: 3-4.
41. Prakash, B. (1970). "Rigveda". 11. 29: 3-5.
42. Prasad, V.R. (1984). "Mammalian fauna of Punjab". in Atwalbains&Dhindsa eds. Status of wildlife in Punjab, Ludhiana: the Indian ecological society: 25-39.
43. Rama (1978). "Our Water resources": National Book Trust. India.
44. Ramakrishnan, P.S. (2008). "Ecology and Sustainable development: working with knowledge system". National book trust. New Delhi.
45. Randhawa, M.S. (1980). "A history of agriculture in India". Vol.I. ICAR. New delhi: iii-iv.
46. Randhawa, M.S. (1986). "A history of agriculture in India". IV. New delhi: Indian council of agricultural research: iv-v.

47. Randhawa, M.S. (1982). Op.cit. 203-208.
48. Randhawa, M.S. (1982). "A history of agriculture in India". Vol. II. ICAR. New delhi. 10-11.
49. Randhawa, M.S. (1980). "A history of Agriculture in India. 1. New Delhi. Indian council of Agricultural Research.
50. Singh, N. (1998). "Administration and development in Indian state : impact of area reorganisation on development process". Ed, 1. Anmol publication. New delhi. 167-182.
51. Singh, M. (2012). "Mapping the agricultural geography: a district wise pattern in the south-eastern part of Punjab province in colonial India". IJMIE.2(6).
52. Singh, Y. (2001). "Geo-ecology of the transSatluj Punjab-Haryana shiwalik hills, NW India". Envis bull: Himalayan ecology and development. 9(2): 15-34.
53. Starcey, P.D. (1963). "Wildlife in India: its conservation and control". New delhi: ministry of food & agriculture.
54. Shiva, V. (1991). "The Green Revolution in Punjab". The Ecologist. 21: 57-60.
55. Shiva, V. (1989). "The Violence of the Green Revolution: Ecological Degradation and Political Conflict in Punjab". Dehra Dun: Research Foundation for Science and Ecology.
56. Singh, G. (1991). "Environmental Deterioration in India- Causes and Control: With Special Reference to Punjab". New Delhi: Agricole Publishing Academy.
57. Sharma, M.L. and Dak, T.M. (1989). "Green Revolution and Social Change". Delhi. Ajanta books.
58. Singh, J. (1974). "The Green Revolution: How Green it is". Kurukshetra. Vishal Publications.
59. Singh, P. (2011). "Economic benefits and Ecological cost of the Green Revolution". Journal of Social and Economic development. 7. 1: 64-74.
60. Singh, R.B. (2000). "Environmental consequences of agricultural development: a case study from the Green Revolution state of Haryana, India". ELSVIER. Agriculture, Ecosystem and Environment. 82: 97-103.
61. Singh, R.B., 1997. "Impact of agriculture and land use/cover change on soil and water resources and ecosystem sustainability: a case study of Punjab". In: Epps, R. (Ed.), Sustainability of Rural System in the Context of Global Change. University of New England, Armidale.
62. Subramanian, V. (2000). "Water quantity-quality perspective in South Asia. Kingston International publishers. Surrey, U.K.
63. Trevaskis, H.K. (1928). "The land of five rivers". Oxford university press.
64. Vashistha, N. (2007). "Green Revolution". Pratiyogita Darpan. 636-637.
65. Wilson, F. (1904). 'Punjab notes and quarries'. 547. 67-68.
66. World Bank (1992). 'World Development Report: Development and Environment'. Oxford:

Oxford University Press.

67. Wolf, E.C. (1986). "Beyond the Green Revolution". New approaches for Third World Agriculture. Paper 73. Washington: Worldwatch Institute.
68. World Bank (1992). "World Development Report: Development and Environment". Oxford: Oxford University Press: 1.
69. Yadav, S. (2004). "Water: Problem and its Management. Hope India Publications. Gurgaon.
70. Yapa, L.S. (1979). "Ecopolitical economy of the Green Revolution", Professional Geographer. 31: 371-376.

