# **Environmental degradation problem and planning in Alwar district**

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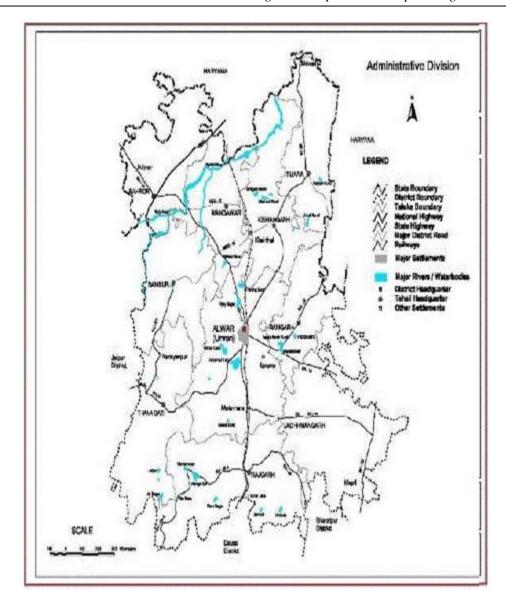
#### Abstract

The crisis caused by environmental degradation has reached its peak in Alwar district. Due to the rapid population growth in Alwar in the last two decades, every factor of the environment has been overexploited. Ground water, which is the main basis for drinking water, irrigation, domestic work and use in industries in this area, comes under the category of overexploitation. If this condition of its use continues, then in the coming decade, the ground water reserves in Alwar district will be almost exhausted. In the coming decade, only 15 percent of the existing ground water reserves will be left and the proportion of chemical solutions in the remaining water reserves will increase so much that the ground water of Alwar district will not be potable. Keeping in view the above problem, a water horoscope should be prepared by assessing all the water resources of Alwar district and on the basis of that a future public policy should be prepared so that after the Green Revolution, it would help in getting rid of this terrible water crisis in Alwar district. Could Keeping all these things in mind, the development of Alwar district should be done on the basis of water intake only, so that the unbalanced distributed water resources can be balanced and the precious water that goes waste every year can be saved.

Keywords: Environmental degradation, environmental crisis, land degradation, soil erosion, water crisis, water conservation, environmental protection measures and conclusions.

#### I. Study Area:-

Alwar, known as 'Kashmir of Eastern Rajasthan', was founded by Ravraja Pratap Singh of the Kachwaha dynasty. Its capital was Viratnagar. The Pandavas had spent their exile at the king of Virat Nagar. This area is counted among the oldest areas of Rajasthan. In Mahabharata period it was known as Matsya Kshetra. After independence, on March 18, 1948 (first phase of integration), Alwar, Bharatpur, Dhaulpur and Karauli, Matsya Union was established and later on May 15, 1949, Matsya Union and Greater Rajasthan (fourth phase) were merged to form United Greater Rajasthan. Constructed. Presently Alwar district comes under Jaipur division. Ruparel and Sabi rivers flow through Alwar district.



The latitudinal position of Alwar district is from 27 degree 4 minutes north latitude to 28 degree 4 minutes north latitude. The longitudinal position of Alwar district is from 76 degree 7 minutes east longitude to 77 degree 13 minutes east longitude. The area of Alwar district is 8380 square kilometers. Neighboring districts bordering Alwar district are Bharatpur, Dausa, Jaipur and Sikar districts. There are total 16 tehsils of Alwar district which are Alwar, Thanagaji, Kishangarh Bas, Tijara, Govindgarh, Kathumar, Bansur, Raini, Malakheda, Kotkasim, Laxmangarh, Rajgarh, Mundawar, Behrod, Neemrana, Ramgarh. The total population of Alwar district is 36,74,179. Alwar district has a population density of 438 per square kilometer. Sex Ratio in Alwar is 895.

### Environmental degradation in Alwar district:-

Along with the water crisis in Alwar district, the problem of land degradation is also acute and there is a lack of moisture in the soil. Along with soil degradation, if the percentage of forests is seen in Alwar district, then it is very less, which is only 3.13 percent of the total land area. Forests are found only on 2146 hectares of the total land area of 68371 hectares, which is a serious ecological problem. At the same time, the demand for fuel and timber also remains constant. That's why the importance of development of agro-forestry, afforestation etc. has been shown. From the point of view of animal husbandry development, more importance is given to the numerical aspect instead of the qualitative aspect in Alwar district. For this, livestock development has been considered necessary through pasture development and good health services. The direct effect of falling ground water level can be manifested in the form of collapse of the entire economy of the region and more than half of the food grain production can be affected as a result of water crisis in future. According to a survey, ground water in Alwar district is receding at the rate of 0.39 meters per year and ground water is being exploited

annually more than twice the recharge of ground water. Despite this, there is no restriction of any kind on the expansion of agricultural works done on the basis of ground water in this area. After the above study, after studying the strategy of planning for environmental degradation and sustainable development in the entire Alwar district, along with the details of the major problems that have emerged, suggestions are being presented for proper solutions, details of which are presented. done in the research paper.

## **Environmental problems in Alwar district:**

- (i) Rapidly falling water table has emerged as the biggest problem in Alwar district. The water level in this area is falling at the rate of 0.39 meters every year. The decline in water level is more in industrial areas of Neemrana, Bhiwadi, Shahjahanpur and Behror in Alwar district due to which sufficient quantity of drinking and irrigation water is not available. Apart from ground water, problems related to surface water have also come to the fore during the study in Alwar district, in which surface water flows rapidly during rains and goes elsewhere. The traditional methods of conservation of water resources of the district like Nadi, Bawdi, Talab, Jhalra, Tanka, well etc. have been neglected. They have not been managed properly, as a result of which the amount of water in the district is decreasing day by day.
- (ii) The problem of soil erosion has also emerged as an important problem in Alwar district, due to which the agricultural land of this area is also getting converted into non-agricultural land. Soil erosion is taking place mainly by water during the rainy season and by wind during the rest of the rainy season. Aridity is found more in the western part, due to which due to less amount of moisture in the soil, the upper fertile layer of the soil is blown away by the stormy storms in the summer, due to which the right agricultural area has been converted into uncultivated land.
- (iii) Vegetation cover in the district is continuously decreasing because of dry conditions found in the district due to water scarcity and uncontrolled animal grazing, forest being the only source for fuel, ground water level going deep, insects in the forests. etc. In the district, the Khejdi tree is being preyed upon by an insect named Salestrna and a fungus named Grichotrama.
- (iv) The problem of rapidly depleting ground water and fluoride is coming to the fore in the district. Apart from Thanagaji tehsil of the district, all the tehsils have come under the overexploitation category. The extraction is more than the recharge of water. The underground water is being exploited at a rapid pace for drinking water and irrigation of the growing population. When the water went to a greater depth, many salts got mixed in it, due to which the water has become polluted. And the problem of fluoride is continuously increasing in the district. Drinking fluoride-rich water causes hunchback disease, yellowing of teeth, weakening of bones and signs of old age, which are fatal for life. The problem of fluoride is prevalent in all the tehsils of the district but some areas of Laxmangarh, Kathumar and Rajgarh tehsils are most affected by it.
- (v) In Alwar district, the watershed development programs are not being accelerated properly to stop and recharge the surface water which is received in the form of rain in the rainy season.
- (vi) Increasing population in the district is hindering development. In the year 2001, the population of Alwar district was 29,92,592, which increased to 36,74,179 in the year 2011, due to which the per capita facilities have decreased. The pressure on resources has increased. The problems of soil erosion, deforestation and environmental pollution have come to the fore. Education, medical, communication and transport facilities in the district are proving secondary due to the increasing population. As a result of which the human resource of the district is lagging behind in the race of development.
- (vii) Sabi and Sota rivers have been important in the past from the point of view of surface water in the study area. At present, due to continuous lack of rainfall, their flow during monsoon has reduced a lot. Especially the rainy season water flow of Sota river has almost ended. Because illegal mining of gravel on a large scale in the flow area and resulting from it has been converted into deep pits and rough surface. Thus, absence of surface water sources has been observed in the study area.
- (viii) Animal resource in Alwar district is important in numerical terms but qualitatively the condition of animals is pathetic. Fodder crops are not produced separately for animals, there is no best arrangement of pastures, lack of health facilities etc. problems related to animal husbandry are found in this area.
- (ix) Industrial development in Alwar district after 1981, the trend of urbanization, due to the materialistic thinking of man, the problem of environmental pollution is an important problem of Alwar district, due to which other problems have been strengthened. Various industrial units in Neemrana, Behror and Bhiwadi industrial area Trees have been cut down due to the establishment of fertile land has been acquired. There is rapid exploitation of ground water. The smoke coming out of the chimneys of the factories, in which poisonous gases like carbon dioxide, carbon monoxide and sulfur dioxide etc. are mixed in the atmosphere and are causing various problems. Increase in ground temperature, occurrence of diseases in nearby agricultural crops and adverse effects on human health are being manifested. Water, air and noise pollution is increasing. Behror, Neemrana, Shahjahanpur and Bhiwadi etc., due to rapid industrialization and being located on National Highway No. 8, high levels of noise and air pollution are found due to the abundance of means of transport and

the toxic gases from the smoke coming out of these are lead, mercury. etc. are being emitted, which is adversely affecting human health.

- (x) Plastic waste has emerged as a serious problem for environmental pollution in the urban areas of Alwar district. Once this substance is produced, it becomes impossible to get rid of it. It remains as a burden on the earth and it is turning into a mountain of garbage around the urban area. By burying it in the ground, the land becomes polluted and such land becomes totally unfit for cultivation and on putting in water, it destroys the biowealth there, because this product is hard, soft, flexible, flexible, according to the needs of humans. Heat sensitive, transparent and opaque etc. take many types of forms.
- (xi) Laxity of public participation is also a problem in Alwar district, as a result of which various problems are arising. Due to lack of public participation in the Jal Chetna Rath Yatra conducted by the state government in May-June-2006, there is indifference among the general public towards water conservation, due to which many problems have arisen.

Therefore, the continuous and sustainable development of Alwar district will be able to gain momentum only after solving the above problems.

#### Suggestions for environmental protection in Alwar district: -

Without the successful diagnosis of the problems mentioned earlier, the Ganga cannot be given proper direction for sustainable and sustainable development in Alwar district. That's why the following suggestions are being proposed for their diagnosis: -

- (i) The biggest problem of Alwar district is the rapidly falling ground water level, for which the ground water recharge rate should be accelerated by managing rain water and making a watershed of all water resources. Proper water policy should be implemented. The rapid over-exploitation in industrial areas like Bhiwadi, Neemrana, Shahjahanpur and Behror should be controlled. There should be a legal ban on making wells and tube wells. As Alwar district comes under overexploitation category, the ground water should be used judiciously. So now the time has come to work on the concept of "The more you save, the more you get".
- (ii) To solve the problem of soil erosion in the district, forest belt should be developed from north to south in the district, scientific agriculture should be emphasized, vegetation barrier should be created in hilly and plateau areas of Thanagaji, Alwar and Rajgarh. Let's go Crops should be sown in rotation, tree plantation should be done on barren land, animal grazing should be controlled and organic fertilizers should be used.
- (iii) To solve the problems arising due to uneven contrast of water resources in Alwar district, water should be made available from water surplus areas to water deficit areas. Water storage structures should be constructed in the south-west region of water-logged areas to control rainwater and control the runoff during rainy season so that water can be conserved and water does not flow in vain. Reciprocal methods of water conservation, such as pulse There is a need to revive Bawdi, Tanka, Khadin, Talab etc. So that water can be used judiciously and water can be saved during rains, which gets wasted.
- (iv) A detailed discussion should be held with the public about family planning to control the increasing population in the district. One should be made aware of the dangers of increasing population and development of human resource is very important for scientific and above exploitation of resources and this development is possible through education, therefore emphasis should be given on promotion and dissemination of education in the district.
- (v) Watershed development programs should be conducted at a rapid pace in this area. The full responsibility of its operation should be on the local people and the task of monitoring it should be with the administration. It should be operated with the help of voluntary organizations so that real benefits can be derived from it.
- (vi) Barren land should be developed. For its development, it should be converted into agricultural activities through several conservation activities conducted under the Watershed Development Program.
- (vii) In order to develop animal resources of Alwar district, importance should be given to qualitative aspect instead of numerical aspect. For the development of animal resources, best health services should be provided in this area and advanced breeds should be developed. Pasture should be developed in proportion to the number of livestock so that proper amount of balanced nutrition can be provided and human resources should be trained to take care of the animals.
- (viii) Keeping in view the geo-ecological conditions of Alwar district and to prevent the problem of increasing environmental pollution, intensive tree plantation should be done in this area. The presence of forests on 33 percent of the total area is the main aspect of India's revised forest policy of 1988, but in Alwar district only 3.13 percent of the total land area is forested, so the development of forests is done through agro-forestry, social forestry and Horticulture should be done so that the necessary average vegetation cover can be developed in this area, for this, along with the establishment of good nurseries at the local level, training should be given to the farmers related to these activities and the distribution of plants according to the agro-climatic conditions here. It should be done according to this so that the percentage of survival of plants is good and biological control activities can be conducted successfully.

- (ix) To solve the problem of increasing environmental degradation in the district, the gases discharged from the industries should be released into the atmosphere after purification. Industrial units should be established away from residential areas. DJ playing fast in the urban area. And horn etc. should be banned. Lead-free petrol should be used and operation of older vehicles should be banned and over-exploitation of ground water should be stopped in industries.
- (x) Uncontrolled illegal mining in the Aravalli range in the district should be controlled by imposing a ban.
- (xi) Public participation is essential for the successful operation of developmental programs and solving the problems arising, and to develop this public participation, environmental protection programs and schemes should be started only after taking them into confidence. And the full responsibility for the operation of the schemes should be given to the local people and the work of monitoring it should be with the administration and the traditional technical knowledge should be linked to the modern developmental technical knowledge. Public awareness should be spread in the district through street plays, discussions and self-help organizations to develop consciousness about environmental protection among the public.
- (xii) Change in comprehensive personal approach and rules, that is, special emphasis should be given to the approach of protected use and overall development instead of the ideology of over-exploitation and personal interest

If the above suggestions are successful, sustainable development of Alwar district will be possible and every developmental activity will gain momentum.

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