

Lecture 14: Wasteland Reclamation



Lydia R. Leonardo, DrPH
Professor Emeritus, UP Manila
Director, UE Office of Research Coordination
Professorial Lecturer, UP Diliman

The image shows a vast, desolate landscape under a heavy, orange-hued sky. The foreground is dominated by a network of deep, dark cracks in the parched, reddish-brown earth. In the middle ground, there is a flat, open plain with sparse, low-lying vegetation. The background features a range of low mountains or hills, their details softened by a thick layer of haze or dust. The overall color palette is monochromatic, consisting of various shades of brown, tan, and orange, which emphasizes the arid and wasteful nature of the environment.

WASTELAND RECLAMATION

Definition of Wasteland and Wasteland Reclamation

Wasteland is a land that is unfit for cultivation or is unproductive, unimproved or barren.

Wasteland reclamation is the creation of new land where there is water.

It consists of two distinct forms:

- 1. creating new land from sea or riverbeds
- 2. restoring an area to a more useful and productive form

Methods of Wasteland Reclamation

- 1. Aforestation – growing forests over cultivable wasteland
- 2. Reforestation – growing the forests again over the lands where they once existed but were destroyed by fires, overgrazing and excessive cutting. This method checks water logging, floods, and erosion and eventually increases productivity of the land.
- 3. Providing surface are – easiest way to protect the land surface from erosion which is to leave crop residues on the land after harvesting.

Methods of Wasteland Reclamation

- 4. Mulching – protective cover of organic matter and plants, cotton stalks, tobacco stalks, etc. used to reduce evaporation and helps in retaining soil moisture and preventing soil erosion.
- 5. Changing ground topography of downhill areas – running water erodes the hill and carries the soil along with it. This can be prevented by altering ground topography such as by
 - a. strip farming – where different kinds of crops are planted in alternate strips along the contour of the land.
 - b. terracing – where the earth is shaped in the form of levelled terraces to hold soil and water. The terrace edges are planted with plant species that are capable of anchoring or holding the soil stably.
 - c. contour ploughing where the ploughing of the land is done across the hill and not in an up and down manner.

Methods of Wasteland Reclamation

- 6. Leaching done in salt affected land where the salinity is decreased by leaching the land with much water.
- 7. Changing agricultural practices – such as mixed cropping, crop rotation and cropping of plants which are for the purpose of improving soil fertility.
- 8. Ecological successions – which refers to natural development or redevelopment of an ecosystem which helps in reclaiming the minerally deficient soil of wasteland.

Need for Wasteland Development

- Wasteland development provides a source of income for the poor.
- It ensures a constant supply of food, fodder and timber for local use.
- It makes the soil fertile by preventing soil erosion and conserving moisture.
- The program helps maintain an ecological balance in the area.
- The increasing forest cover helps in maintaining local climatic conditions.

- **An example of a successful wasteland reclamation**

TEHRI, UTTAR PRADESH

Nagchaund village in Tehri District of Uttar Pradesh was once an eroded and deforested land. When Soban Singh Bhandari returned to his village after retirement from the army in 1987 he was struck by this degradation. After six months he became the pradhan of the village and decided to implement various village development schemes differently. Through the Jawahar Rozgar Yojana, he gained immense community support. In 1990 the Forest Department selected a 30-hectare barren piece of community land for a micro-watershed development program. The villagers controlled grazing in the area, undertook plantations for fuel and fodder. Bhandari helped the village raise money by selling the fodder from the area to a neighboring village and the money was used for development and maintenance work. This community effort has had a great impact on the ecology of the area. The moisture content of the area increased and the water sources of the villages were recharged. Local people now have access to all the natural resources they need for their daily lives.



Thank you.