

WETLANDS

FREQUENTLY ASKED QUESTIONS

1. What are wetlands ?

Wetlands are the transitional areas between land and water. These are predominantly characterized by the presence of water and hydric soils. Wetlands are rich in biological diversity and are recognized amongst the most productive ecosystems in the world. Ramsar Convention defines wetlands as “areas of marsh , fen, peatland or water whether natural or artificial, permanent or temporary with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed 6 meters(20 feet)”.

2. Why wetlands are important ?

Wetlands are important on following counts:

- Act as staging grounds for waterfowl
- Recharge of Ground Water
- Mitigate and control natural floods
- Refuge for rare and endangered species
- Natural storage base for carbon
- Natural sinks for pollutants
- Tourism and recreation
- Scientific research
- Natural heritage areas

3. What are various threats to wetland ecosystems :

Various threats to wetland ecosystems are :

- Drainage for agriculture and mosquito control
- Stream canalization and upstream diversion of water
- Filling for roads, residential and industrial development
- Construction of dikes, dams etc. for floods control, water supply and irrigation

- Discharges of domestic sewage and industrial effluents, agricultural runoff carrying pesticides, herbicides and nutrients
- Mining of wetland soils for sand, gravel and other materials
- Illegal encroachments.
- Soil erosion leading to siltation.
- Invasion and growth of water hyacinth

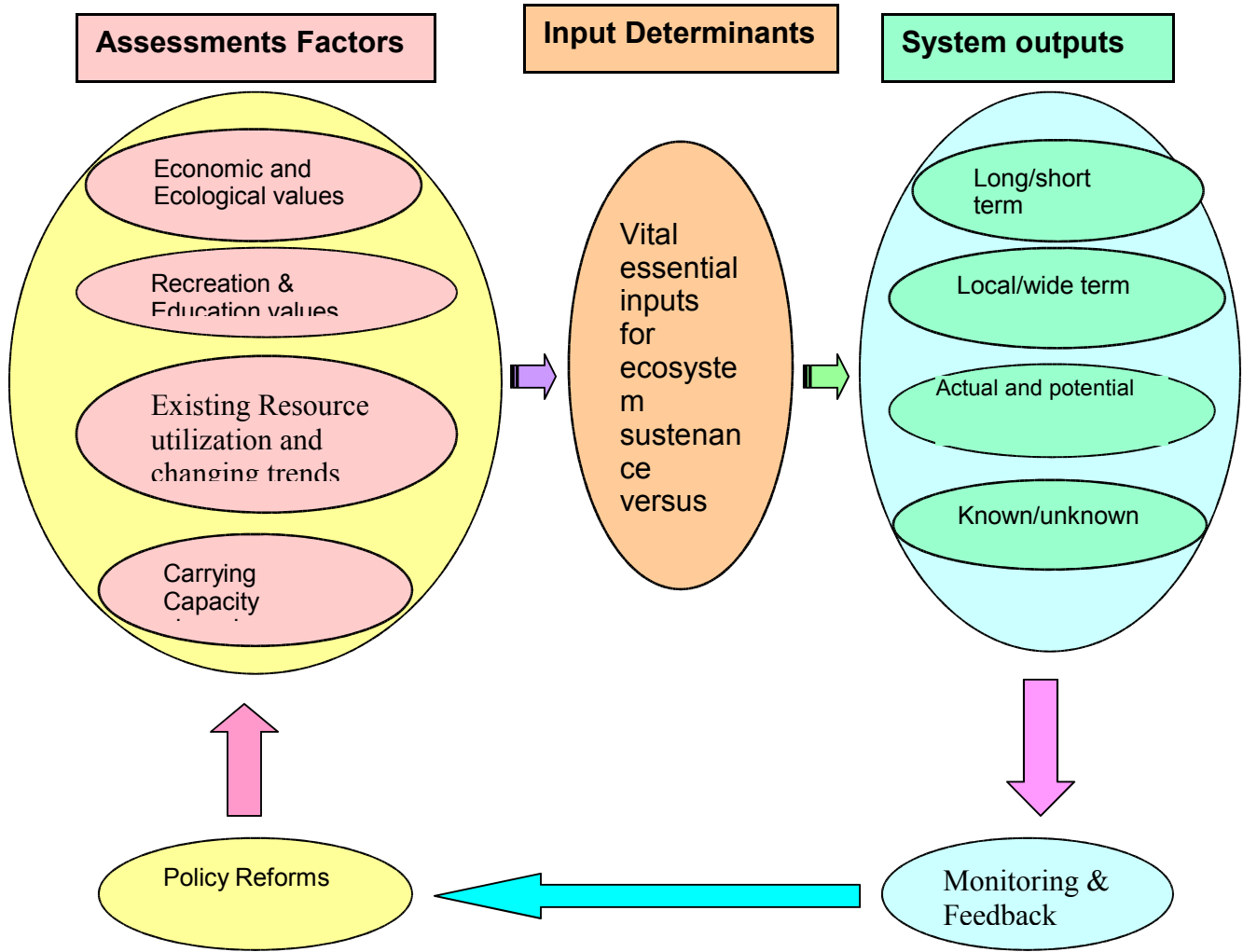
4. Which are the Ramsar Wetlands in India ?

Sr. No.	Wetland Name	Date of designation	State	Area (ha)	Coordinates
1.	Ashtamudi Wetland	19/08/02	Kerala	61,400	08°57'N 076°35'E
2.	Bhitarkanika Mangroves	19/08/02	Orissa	65,000	20°39'N 086°54'E
3.	Bhoj Wetland	19/08/02	Madhya Pradesh	3,201	23°14'N 077°20'E
4.	Chilika Lake	01/10/81	Orissa	116,500	19°42'N 085°21'E
5.	Deepor Beel	19/08/02	Assam	4,000	26°08'N 091°39'E
6.	East Calcutta Wetlands	19/08/02	West Bengal	12,500	22°27'N 088°27'E
7.	Harike Lake	23/03/90	Punjab	4,100	31°13'N 075°12'E
8.	Kanjli	22/01/02	Punjab	183	31°25'N 075°22'E
9.	Keoladeo National Park ^{MR}	01/10/81	Rajasthan	2,873	27°13'N 077°32'E
10.	Kolleru Lake	19/08/02	Andhra Pradesh	90,100	16°37'N 081°12'E
11.	Loktak Lake ^{MR}	23/03/90	Manipur	26,600	24°26'N 093°49'E
12.	Point Calimere Wildlife and Bird Sanctuary	19/08/02	Tamil Nadu	38,500	10°19'N 079°38'E
13.	Pong Dam Lake	19/08/02	Himachal Pradesh	15,662	32°01'N 076°05'E
14.	Ropar	22/01/02	Punjab	1,365	31°01'N 076°30'E
15.	Sambhar Lake	23/03/90	Rajasthan	24,000	27°00'N 075°00'E
16.	Sasthamkotta Lake	19/08/02	Kerala	373	09°02'N 076°37'E
17.	Tsomoriri	19/08/02	Jammu & Kashmir	12,000	32°54'N 078°18'E
18.	Vembanad-Kol Wetland	19/08/02	Kerala	151,250	09°50'N 076°45'E
19.	Wular Lake	23/03/90	Jammu & Kashmir	18,900	34°16'N 074°33'E

5. Which important wetlands from Punjab have been degraded/lost ?

Wetland Name	Nearest Town	District
Bhupinder Sagar	Patran/Samana	Patiala
Chhangli Chhamb	Ferozepur	Ferozepur
Chhangli Talao	Chhangli	Ferozepur
Chhamb Gurditiwala	Ferozepur	Ferozepur
Fazilka	Fazilka	Ferozepur
Sangreri	Sangreri Bareta	Mansa
Dharamkot Dham	Derababa Nanak	Gurdaspur
Gaunspur Chhamb	Dasuya	Hoshiarpur
Jandwal Chhamb	Jandwal	Hoshiarpur
Rahon De Chhamb	Rahon/Nawanshah r	Jalandhar

6. What is the wise use wetland conservation strategy in Punjab?



7. How can a common man contribute in wetland conservation ?

The most important component for ensuring proper conservation and protection of wetland is the awareness of common man about the uses, values and functions of these ecosystems. Any programme can be successful only if the public directly dependent on the resources is totally aware and gets involved in the day-to-day programmes. While planning, financing and implementation of programmes are important factors but contribution and involvement of locals is of paramount significance. The following aspects needs to be taken care of by one and all :

- i) be aware and make others aware about the values, functions, uses and attributes of such ecosystems.
- ii) Understand and make others to understand the threats, visible or invisible, direct or indirect, manmade or natural that may lead to the degradation and loss of such habitats.
- iii) Take time to visit and explore the functions and the contribution of the wetlands.
- iv) Ask yourself and others about the significance of wetlands for humans and other living beings and what benefits you/they have been and are deriving from the resource.
- v) Try to learn about the birds including migratory birds that have been inhabiting the areas a couple of decades ago and are seen now. Explore the reasons for change.
- vi) Learn about the source of water, biological resources in the area.
- vii) Resolve to find out ways and means and to involve one and all for conservation, protection and improvement of the habitat for you and other living beings including migratory waterfowl.
- viii) What else could be done by individual to restore the pristine glory of the ecosystems for the coming generations?
- ix)

8. Which all are members of State Steering Committee on wetlands of Punjab?

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|----|--|---------------|
| 1. | | Chairman |
| 2. | Chief Secretary, Govt. of Punjab
Secretary to Govt. of Punjab,
Deptt. of Science, Technology, Environment
and Non-Conventional Energy. | Vice-Chairman |

GOVERNMENT OF INDIA

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| 3. | Additional Secretary or his nominee,
Ministry of Environment & Forests,
Govt. of India, CGO Complex,
Lodi Road, New Delhi 110 003. | Member |
| 4. | Representative of the Indian Army | Member |

OFFICIALS OF THE STATE GOVERNMENT

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| 5. | Financial Commissioner (Development) and

Secretary to Government of Punjab,
Deptt. of Agriculture. | Member |
| 6. | Principal Secretary to Government of Punjab
Department of Irrigation & Power. | Member |
| 7. | Principal Secretary to Government of Punjab,
Department of Forest & Wildlife. | Member |
| 8. | Chief Engineer, Irrigation (Drainage), Punjab
Hydel Building, Sector 18, Chandigarh | Member |
| 9. | Chief Engineer, Irrigation (Canals), Punjab
Hydel Building, Sector 18, Chandigarh. | Member |
| 10. | Chief Engineer-cum-Director,
Irrigation & Power Research Institute, Amritsar | Member |
| 11. | Principal Chief Conservation of Forest, Punjab
13 Bays Building, Sector 17, Chandigarh. | Member |
| 12. | Chief Executive,
Punjab Energy Development Agency,
SCO: 54-56, Sector 17-A, Chandigarh. | Member |
| 13. | Chief Conservator of Soils, Punjab
SCO: 92-94, Sector 17-D, Chandigarh | Member |
| 14. | Director & Warden, Fisheries, Punjab,
SCO: 1040-41, Sector 22-D, Chandigarh. | Member |

15. Chief Wildlife Warden, Punjab,
SCO: 2463-64, Sector 22-C, Chandigarh Member

16. Director, Tourism, Punjab,
SCO: 2917-18, Sector 22-C, Chandigarh. Member

REPRESENTATIVES OF ACADEMIC & RESEARCH INSTITUTIONS

17. Dr. S.M. Handa, Professor,
Deptt. of Zoology, Panjab University,
Chandigarh. Member

18. Dr. S.S. Dhillon, Consultant (POS),
Punjab State Council for Science & Technology,
Sector 26, Chandigarh. Member

19. Dr. Brij Gopal, Professor,
Deptt. of Environment Sciences,
Jawahar Lal Nehru University,
New Delhi. Member

20. Representative of Vice Chancellor,
Punjab Agriculture University,
Ludhiana Member

21. Representative of Vice Chancellor,
Guru Nanak Dev University,
Amritsar. Member

22. Representative (Director/Deputy Director) of
National Environment Engineering Research Institute,
Nehru Marg, Nagpur. Member

DEPTT. OF ENVIRONMENT OF STATE GOVERNMENT

23. Special Secretary to Government of Punjab,
Deptt. of Science, Technology, Environment
and Non-Conventional Energy. Member Secretary

24. Executive Director,
Punjab State Council for Science & Technology,
Sector 26, Chandigarh. Member

25. Director (Environment),
Punjab State Council for Science and Technology,
Sector 26, Chandigarh. Member

26. Chairman, Punjab Pollution Control Board,
Vatavaran Bhawan, Nabha Road, Patiala. Member

DISTRICT MAGISTRATES/OFFICERS OF CONCERNED DISTRICTS

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|-----|---------------------------------|--------|
| 27. | Deputy Commissioner, Kapurthala | Member |
| 28. | Deputy Commissioner, Amritsar | Member |
| 29. | Deputy Commissioner, Ferozepur | Member |
| 30. | Deputy Commissioner, Ropar | Member |

NON-OFFICIAL MEMBERS

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|-----|--|--------|
| 31. | Rana Gurjit Singh, MLA, Kapurthala | |
| 32. | Dr. Asad Rehmani, Director,
Bombay Natural History Society (BNHS)
Hornbill House, Dr. Salim Ali Chowk,
Saheed Bhagat Singh Road,
Bombay – 440 023. | Member |
| 33. | Secretary General,
World Wide Fund for Nature – India,
172-B, Lodhi Estate, New Delhi. | Member |

NON-GOVERNMENT ENVIRONMENTALISTS

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| 34. | Air Marshal (Retd.) K.S. Bhatia,
2433, Phase – 10, Mohali. | Member |
| 35. | Brig. Sukhjit Singh, MVC,
(formerly Maharaja of Kapurthala),
The Villa, Kapurthala | Member |

9. How should the National Green Corps Programme be implemented in the districts through Eco-Clubs ?

- For implementation of the scheme each district may be divided into different convenient zones as is being done under NSS and other programmes.
- There are two working Saturdays in a month. The schools may take up NGC related activities on these days. On other days during morning assembly some environment messages should be given by the school faculty to the students.

- Activities under NGC Programme may also be taken up during the Socially Useful Productive Work (SUPW) period already being undertaken by the schools. Alternatively a Zero Period may be specified for taking up work related to NGC.
- Each identified school should constitute a Committee of three staff members under the chairmanship of Principal of the school to decide the activities to be taken up. Sarpanch of the Village may also be involved.
- 50 Students to be made members of Eco-Clubs could be divided into different groups (preferably five groups) to attend to various environment activities identified by the school. A competition may later on be held amongst these groups of students to find the best work done. Committee of the school headed by Principal should evaluate the programme from time to time and take necessary follow up steps.
- The Eco-Clubs may also take steps to mobilize funds from other sources as admissible.
- Schools may also involve local NGOs for taking up some important activities.
- Oath Taking Ceremony should be held while constituting Eco-Clubs in the Schools and its reactivation in the new session.
- The schools will identify the NGC Corners/NGC activity rooms to display material related to this programme.

10. What are various activities that can be taken up by schools under National Green Corps Programme ?

Each Eco-club need to take up such programmes that the local environment gets improved while the members become aware about the issues affecting the surrounding environment. Some action points as broad guidelines for implementation of the scheme for the districts and for Eco-clubs are as suggested below :-

- The local specific problems should be addressed by each Eco-Club.
- The first priority should be to beautify the school and then adjoining areas should be adopted to improve its environment.
- Village ponds/Wetlands, Road Blocks (Road sides) passing by/adjoining the schools could be adopted for their improvement/greening and beautification by plantation and their maintenance.
- Trees should be planted to create Trevanies of Neem, Peepal and Bohar. Plantation should be promoted to commemorate important social and historical events in the schools like plantation by the staff/Eco-Club Members on the occasion of important days and on the occasion of visit of VIPs or retirement of staff members. The maintenance of such plantation should be the responsibility of the Eco-Club.
- Besides plantation of Timber Species, ornamental, horticulture (flowering & fruiting), shady trees and medicinal plants, shrubs and herbs should be planted.
- Plantation of hedge plants may be taken up in place of boundary walls around the schools where the boundary walls have so far not been made.
- Plantation in the village common lands, religious places, cremation grounds and flaying yards as well as along the village phirnis and link roads.
- Plantation of trees and other plants by student Eco-Club Members in their houses.
- Small botanical gardens may be created in the schools where space is available.
- For watering the newly planted trees, schools could use discarded Coca-Cola and Water Bottles by making a hole at the

bottom and at the top. A thread is inserted in the hole at the bottom of the bottle to facilitate drop-by-drop release of water. The bottle is placed near the plant vertically. One full bottle can serve the purpose of watering the plant for more than a week

- Cleanliness should be done on priority. Dust-bins should be placed, if already not provided, to inculcate the habit of proper disposal of wastes.
- Educating the students to take care of common water supply taps in the villages and adjoining areas to save water.
- The Eco-Club Incharge Teacher may depute some of the students to survey common water taps in the adjoining village(s) to stop unnecessary wastage of water.
- Take up activities for rain harvesting and water conservation in the schools.
- Steps for control of congress grass, *Lantana* and Water Hyacinth in the areas adjoining the schools may be initiated.
- The schools may organize visits of the Eco-Club Members to the ecologically important areas like wetlands, sanctuaries, parks, etc. to make them understand the significance of such eco-systems to make them aware about the role of Eco-Club Members in conservation and protection of such habitats.
- Organize visits of the student members to the village or town, agricultural areas, some industries, waste water drains etc. to make them understand about the environmental problems and their causes and consequences and how to address the issues.
- Toilets in each school should be kept clean.
- The individual schools or group of schools in a zone may organize exhibitions, competitions and fairs on environment.
- Students may be encouraged to frame slogans on environment and good slogan writers may be suitably awarded.
- National Green Corps Jhaki may be taken out during the district level functions.
- Green Day may be celebrated once in a month.
- To encourage students for conveying the message to their parents for using less pesticides, avoiding use of dung cakes and other polluting fuels for cooking.
- Celebration of important days in the schools like World Wetlands Day, Earth Day, World Environment Day, Children Day, Republic Day, Independence Day, Teachers Day, etc. and celebration of Wildlife Week by planting trees and organizing discussions/competitions and delivering lectures.
- To adopt and promote vermicomposting for treatment of organic waste in the schools and adjoining villages.

- Intra and Inter-Zonal Competitions may be organized to create more interest among the members of the Eco-Clubs.
- Any other environment related activity.

11. What Type of literature is available under NGC Programme for reference ?

BOOKS :

- Environmental Concerns of India
- A Students Environmental Do-it-yourself Manual
- Karo Ate Sikho
- National Green Corps Programme – Punjab Profile.

PAMPHLETS :

- Harvesting Rainwater
- Reduce, Reuse, Recycle
- Air Pollution
- Let me Live
- Climate Change
- Jalvayoo Parvartan
- Share you Care – for a Better Environment
- Jindagi Ko Jar Se Mat Kateye – Vriksh Bachain Paryavaran Banayan
- Hava Hi Maut Ban Gai To Ek Kehar Uthega Insaan Ko Le Dubega
- Bachon Ki Nahin Perhon Ki Katar Lagaeye

12. What are the important environment related days :

Important days to remember for celebration :

Sr.No.	Date	Occasion
1.	January, 01	New Year Day
2.	January, 26	Republic Day
3.	February, 02	World Wetlands Day
4.	February, 28	National Science Day
5.	March, 21	World Forestry Day
6.	March, 22	World Water Day

7.	April, 07	World Health Day
8.	April, 22	World Earth Day
9.	May, 03	International Sun Day
	May, 11	National Technology Day
10.	May, 31	Non-Tobacco Day
11.	June, 05	World Environment Day
12.	July, 11	World Population Day
13.	August, 06	Hiroshima Day
14.	August, 15	Independence Day
15.	September, 16	International Day Preservation of Ozone Layer.
16.	September, 28	Green Consumer Day
17.	October, 07, 08	World Bird Watch Day
18.	October, 16	World Food Day
19.	October, 30	World Habitat Day
20.	November, 14	Childrens Day (National)
20.	November, 23	World Heritage Day
21.	December, 02	National Pollution Prevention Day
22.	December, 03	National Conservation Day
	December, 13	Energy Conservation Day
23.	December, 29	International Day for Biological Diversity.
24.	December, 31	World Aids Day

Important Weeks :

1.	January, 01-14	Oil Conservation Fortnight
2.	July, 01-07	Vanmahotsava Week
3.	October, 01-07	Wildlife Week

13. Which all are members of State Level and District Level Monitoring Committees of NGC Programme ?

A.

State Level Monitoring Committee

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| 1. | Principal Secretary/Secretary,
Deptt. of Science, Technology & Environment & Non-
Conventional Energy,
Govt. of Punjab. | Chairman |
| 2. | Secretary, Government of India, Ministry of
Environment & Forests or his representative | Member |
| 3. | Chairman,
Punjab Pollution Control Board | Member |
| 4. | Director, Public Instructions (Schools), Punjab | Member |
| 5. | Chairman, Punjab School Education Board | Member |
| 6. | Director, Health Services, Punjab, Chandigarh | Member |
| 7. | Principal, Chief Conservator of Forests | Member |
| 8. | Prof. Gurdev Singh, Addl. Director,
Society for Service to Voluntary Agencies (North) | Member |
| 9. | Regional Director,
Navodaya Vidyalaya, Chandigarh. | Member |
| 10. | Regional Director,
Kendriya Vidyalaya, Chandigarh. | Member |
| 11. | A Representative of Environment Society of India | Member |
| 12. | Executive Director,
Punjab State Council for Science & Technology | Member
Convener |

B. District Level Implementation & Monitoring Committee :

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| 1. | Deputy Commissioner of the
District concerned. | Chairman |
| 2. | District Science Supervisor of the
District concerned | Member |
| 3. | District Forest Officer of the
District concerned. | Member |

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| 4. | District Health Officer of the District concerned | Member |
| 5. | Regional Officer, Punjab Pollution Control Board. | Member |
| 6. | Representative of Municipal Corporation/ Council/Committee. | Member |
| 7. | Principal, Kendriya Vidyalaya To be decided by the Chairman. | Member |
| 8. | Two NGOs/Eminent citizens to be nominated by the Chairman. | Members |
| 9. | Two Principals of Schools in the district to be nominated by the chairman | Members |
| 10. | District Education Officer of the District concerned. | Convener |