

SEMESTER III AND IV

UNIT I

SPECIAL CAMPING PROGRAMME

Special Camping forms an integral part of National Service Scheme. It has special appeal to the youth as it provides unique opportunities to the students for group living, collective experience sharing and constant interaction with community.

Special campings are organised generally on various developmental issues of national importance. In the past the themes of the Special Camping Programmes have been 'Youth Against Famine', 'Youth Against Dirt and Disease', 'Youth for Rural Reconstruction', 'Youth for Eco-Development' and 'Youth for Mass Literacy', 'Youth for National Integration & Social Harmony'. The current theme of Special Camp is 'Youth for Sustainable Development with special focus on Watershed Management and Wasteland Development. Every year 50 percent of the volunteers of each NSS unit are expected to participate in special camps which is of ten days duration.

Contributions of Special Camping Programme

1.1 Concerted efforts have to be made for a number of years for reconstruction activities in rural areas and urban slums for improving the living conditions of economically and socially weaker sections of the community. For this, the universities colleges and +2 institutions having NSS have a special role to play in collaboration with other Departments and local authorities engaged in Development work. They should adopt a village or group of villages/urban slums for intensive social development, where special camps are organised by them year after year to create tangible and durable community assets.

Objectives of the Special Camping programme

1.2 The primary objectives of the special camping programmes are:-

- (i) making education more relevant to the present situation to meet the felt needs of the communities and supplement the education of university/college/school students by bringing them face to face with the community situation.
- (ii) To provide opportunities to students to play their due roles in the implementation of various development programmes by planning and executing development projects, which not only help in creating durable community assets in rural areas and slums but also result in improvement of the condition of weaker sections of the communities.

(iii) Encouraging the students and non-students youth to work along with the adults in rural areas, thereby developing their character, social consciousness and commitment, discipline and healthy and helpful attitudes towards the community;

(iv) Building up potential youth leaders by exploring the latent potential among the campers, both students as well as local youth (rural and urban), with a view to involve them more intimately in development projects for longer periods. The local leadership generated during the camps would also be useful in ensuring proper maintenance of the assets created as a result of the camps.

(v) Emphasizing the dignity of labour and self-help and the need for combining physical work with intellectual pursuits, and

(vi) Encouraging youth to participate enthusiastically in the process of national development, and promote national integration through democratic living and cooperative action.

Suggestive list of activities during Regular as well as Special Camping

1.3 The aim of the Regular and special Camping Programme is to bring youth face to face with the community and make efforts to improve their life. The NSS volunteers are to devote about 80 hours in Regular Activities for the development of the adopted village. Special Camping has been conceived as an opportunity to live with that community for 10 days, and experience the conditions and problems of the people. The NSS volunteers need to be inspired to take initiatives for the improvement of their condition. Although the focus of the Special Camps change periodically and regular programmes are organised in response to the community needs at the micro-level, some broad areas of activities are enumerated below:-

(a) Environment Enrichment and Conservation: Whereas the main theme for the special camping programme would be “Youth for Sustainable Development”, activities aimed at environment – enrichment would be organised under the sub-theme of “Youth for Better Environment”. The activities under this sub-theme would inter-alia, include:

(i) Plantation of trees, their preservation and upkeep (each NSS unit should plant and protect at least 1000 saplings);

(ii) Creation of NSS parks/gardens, TarunTreveniVanas.

(iii) Construction & maintenance of village streets, drains, etc. so as to keep the environment clean;

(iv) Construction of sanitary latrines etc.

- (v) Cleaning of village ponds and wells;
- (vi) Popularization and construction of Gobar Gas Plants, use of non-conventional energy;
- (vii) Environmental sanitation, and disposal of garbage & composting;
- (viii) Prevention of soil erosion, and work for soil conservation,
- (ix) Watershed management and wasteland development
- (x) Preservation and upkeep of monuments, and creation of consciousness about the preservation of cultural heritage among the community.

(b) Health, Family Welfare and Nutrition Programme:

- (i) Programme of mass immunization;
- (ii) Working with people in nutrition programmes with the help of Home Science and medical college students;
- (iii) Provision of safe and clean drinking water;
- (iv) Integrated child development programmes;
- (v) Health education, AIDS Awareness and preliminary health care.
- (vi) Population education and family welfare programme;
- (vii) Life style education centres and counseling centres.

(c) Programmes aimed at creating an awareness for improvement of the status of women: They may, inter-alia, include:

- (i) programmes of educating people and making them aware of women's rights both constitutional and legal;
- (ii) Creating consciousness among women that they too contributed to economic and social well-being of the community;
- (iii) Creating awareness among women that there is no occupation or vocation which is not open to them provided they acquire the requisite skills; and
- (iv) Imparting training to women in sewing, embroidery, knitting and other skills wherever possible.

(d) Social Service Programmes: Depending on the local needs and priorities, the following activities/programmes may be undertaken:-

- (i) work in hospitals, for example, serving as ward visitors to cheer the patients, help the patients, arranging occupational or hobby activities for long term patients; guidance service for

out-door-patients including guiding visitors about hospital's procedures, letter writing and reading for the patients admitted in the hospital; follow up of patients discharged from the hospital by making home visits and places of work, assistance in running dispensaries etc.

- (ii) work with the organisations of child welfare;
- (iii) work in institutions meant for physically and mentally handicapped;
- (iv) organising blood donation, eye pledge programmes;
- (v) work in Cheshire homes, orphanages, homes for the aged etc.;
- (vi) work in welfare organisations of women;
- (vii) prevention of slums through social education and community action;

(e) Production Oriented Programmes:

- (i) working with people and explaining and teaching improved agricultural practices;
- (ii) rodent control land pest control practices;
- (iii) weed control;
- (iv) soil-testing, soil health care and soil conservation;
- (v) assistance in repair of agriculture machinery;
- (vi) work for the promotion and strengthening of cooperative societies in villages;
- (vii) assistance and guidance in poultry farming, animal husbandry, care of animal health etc.;
- (viii) popularization of small savings and
- (ix) assistance in procuring bank loans

(f) Relief & Rehabilitation work during Natural Calamities:

These programme would enable the students to understand and share the agonies of the people affected in the wake of natural calamities like cyclone, flood, earthquakes, etc. The main emphasis should be on their participation in programmes, and working with the people to overcome their handicaps, and assisting the local authorities in relief and rehabilitation work in the wake of natural calamities.

The NSS students can be involved in:-

- (i) assisting the authorities in distribution of rations, medicine, clothes etc.;
- (ii) assisting the health authorities in inoculation and immunization, supply of medicine etc.;

(iii) working with the local people in reconstruction of their huts, cleaning of wells, building roads etc.;

(iv) assisting and working with local authorities in relief and rescue operation;

(v) collection of clothes and other materials, and sending the same to the affected areas;

(g) Education and Recreations:

Activities in this field could include:

(i) adult education (short-duration programmes);

(ii) pre-school education programmes;

(iii) programmes of continuing education of school drop outs, remedial coaching of students from weaker sections;

(iv) work in crèches;

(v) participatory cultural and recreation programmes for the community including the use of mass media for instruction and recreation, programmes of community singing, dancing etc.;

(vi) organisation of youth clubs, rural land indigenous sports in collaboration with Nehru Yuva Kendras;

(vii) programmes including discussions on eradications of social evils like communalism, castism, regionalism, untouchability, drug abuse etc.;

(viii) non-formal education for rural youth and

(ix) legal literacy, consumer awareness.

PLANNING AND PREPARATION OF SPECIAL CAMPING PROGRAMME

Planning

To achieve the objectives of the Special Camping Programme, appropriate planning at State, University and college level is very essential.

1. The camps under special camping programme should be planned well in advance. Special attention should be paid to the needs of the backward areas.

1.1 Planning at the State Level:-

(i) Meeting of the State Advisory Committee:

The State Liaison Officer should convene the meeting of the State Advisory Committee and submit the proposal for the conduct of the Special Camping Programme under NSS during the year. All aspects of the camping and special projects to be undertaken at the state, university

and +2 level should be brought to the notice of the State Advisory Committee. The allocation of the strength of special Camping Programme and pattern of financial expenditure for special camping programme should also be got approved from the State Advisory Committee as prescribed by the Administrative and Financial directives.

(ii) Allocation of strength:

A meeting of the Programme Coordinators of the Universities, +2 stage and the Heads of the NSS Regional Centre should be convened. The Programme Coordinators will make the demand of allocation for Special Camping Programme for their University/+2 Council. The State Liaison Officer will issue necessary orders regarding the allocation of the strength for Special Camping Programme to the various Universities and +2 level.

(iii) Approval of the State Advisory Committee :

The state and university/+2 level projects should be identified and earmarked, so that necessary action may be initiated in time.

(iv) Inter-departmental Coordination :

The State Liaison Officer will take necessary steps to develop coordination with different Departments and agencies which are likely to collaborate in the Special Camping Programme. Meeting of the NSS Programme Coordinators, Head of the NSS Regional Centre and officials of the concerned departments should be convened for discussion and implementation. The representatives of the departments like Health, Rural Development, Panchayati Raj, Agricultural Extension, Land Reforms, Public Relations, PWD, Urban Development, Forest, Khadi and Village Industries, Archaeology etc. are usually associated with the camps.

(v) Release of grants to the Universities and +2 Council

The State Liaison Officer should ensure that the Special Camping grants reach the Universities and +2 Councils in time. It has been observed that in some cases the State Governments do not release the grants to the Universities in time. In such cases, special camping programme suffers due to non-availability of funds despite release of central share to State Government. It has been observed that in some cases, the Universities do not release the grants to the colleges in time. In many cases, the grants are released after the camps are over or by the end of the financial year. This is an undesirable practice. The purpose of releasing the grants to the State Government and Universities is defeated if the grants do not reach the NSS unit before holding the camps. If some University fails to make the grants available to the college before

holding the camps, the State Government should take serious note of this default and take corrective measures immediately.

1.2 Planning at University Level

(i) Meeting of the University Advisory Committee:

The meeting of the University and +2 Advisory Committee should be convened by the concerned Programme Coordinator. The allocation of strength to the various institutions for Special Camping Programme, Financial pattern of expenditure and schedule of the camps should be approved by the University/+2 level Advisory Committee.

(ii) Allocation of strength to the colleges/schools for Special Camping programme.

The allocation of strength for special camping should be made in advance; so that NSS Units are in a position to submit the proposals of Special Camping Programme to the Coordinator within time.

(iii) Issue of Guidelines:

The guidelines regarding Special Camping Programme issued for the concerned year and financial directives indicating the financial pattern of expenditure should be brought to the notice of the Principals and Programme Officers.

(iv) Release of grants to the Institutions:

Special Camping grants are to be released to the Institutions one month in advance of the proposed commencement of the camps.

1.3 Planning at Institution level

(i) Socio-economic and health survey:

It is expected that the concerned NSS Unit has already conducted the Socio economic and Health survey of the adopted village/slum. Unless the survey data are utilized for planning the programme , such surveys would not serve any useful purpose. This data should therefore, be made available to the concerned authorities and followed-up during regular NSS activities. It would be preferable if such surveys in adopted village/slum (where camps are planned) are conducted as part of the normal regular programme before start the camps. Departments and authorities who would be in a position to make use of the survey data should also be involved in the conduct of the survey. It would then form part of the pre-camp planning.

(ii) Identification of the problems and needs of the adopted area:

The data collected during these surveys would give a clear idea of the needs and potential of the community. Based upon this, the projects for the camps could be planned and programmes arranged so that the projects meet the felt needs of the community.

(iii) Discussion with NSS Group Leaders, Volunteers and Colleagues regarding camp projects:

As the Special Camp is considered to be a joint venture of the teaching community and students, like NSS leaders, volunteers and teachers, the Programme Officers should take necessary initiative to discuss the details of the projects and required arrangements of the Special Camping. Efforts may be made to involve more and more people in the organisation of the camp, so that the Special Camp does not remain only as an activity organised by the Programme officer but it becomes a programme of the entire Institution.

(iv) Meeting the college/+2 level Advisory Committee:

After discussion with NSS volunteers and active colleagues, the Programme officer should convene the meeting of the Advisory Committee for finalisation of the camp details like time, dates, venue, site, projects, inauguration and the names of the guests to be invited etc.

(v) Submission of projects to the Programme Coordinator and Regional Centre:-

The Programme Officer should convey the information regarding the proposed Special Camp to the Programme Coordinator, NSS Regional Centre, State Liaison officer and the concerned TOC/TORC. The information should contain the dates, time, venue and other details of the camp. The nature of the projects to be undertaken may also be intimated to the above authorities.

Preparation

2. Preparation at University Level

(a) Orientation of NSS Programme Officers and NSS Leaders at University Level :

Proper orientation of teachers and student-leaders is necessary. Pre-camp orientation is compulsory for all colleges organising camps, particularly in view of the fact that special camping involve various technical aspects with which the camp organizers and students may not be familiar. Special orientation would, therefore, help in proper programmes planning and implementation. It would be preferable if the orientation for the teacher-in-charge and two student leaders from each unit is held at the University/+2 level in collaboration with NSS Regional Centre, the concerned Government Departments and Training & Orientation Centres and covers both programmes and administrative aspects of the camps. The Programme Officer

(teacher-in-charge and the two student leaders) can then organise the orientation for all the students going to participate in the camp at the unit level itself or at the camp site, utilizing the services of locally available technical personnel and experts.

(b) Consultation with the local authorities:

The preparation at the unit level should ensure consultation with the concerned local departments, the support of the local panchayat and the community in the village/slums and with active participation by local youth (upto 10%). Arrangements for upkeep of the assets created as a result of the camps shall also be ensured by the local community. Efforts should be made to identify and involve representatives of different Departments who can be approached for guidance and assistance.

(c) Approval of Proposals submitted by the units:-

The Programme Coordinator should intimate the approval of the projects submitted by the NSS Units one month in advance. It will enable the programme officer to make necessary arrangements and contact the local authorities for the successful organisation of the camp.

(d) Release of grants:

The grants released by the Government of India and the State Governments, may be made available to the NSS Units organising the camp before the camp actually starts. The university must advance the Special Camping grant admissible to the NSS Units subject to the conditions of submission of proper accounts. The remaining balance may be released on the submission of final accounts by the concerned NSS Units.

2.1 Preparation at Unit Level

(a) The Programme Officer will consult the relevant Departments, Panchayats, Local bodies and concerned officials of the other Departments while preparing projects. He/she must have proper assessment of the facilities available from the Departments, so that he/she does not face an untenable situation if promised facilities are not made available to him/her. The Programme officer should also consult the concerned Departments before undertaking any project on Government land, or based on its resources, so that complications may not arise at a later stage.

(b) The Programme Officer will make necessary arrangements for the board required for the volunteers during camp. He/she will also ensure that the tools and equipments required for the projects in the camp are available in sufficient number. It has been observed that in many cases,

improper supply of food and insufficient quantity of tools and equipments adversely affect the camp.

(c) The Programme Officer should make Pre-camp visits to the area for making proper board and lodging arrangements. He/she must ensure that sufficient facilities of latrines and bath are available.

(d) Care must be taken to see that necessary facilities are available to girl students to maintain their privacy and meet their needs.

(e) The Programme Officer should impart training to the NSS volunteers in which all the details of the projects should be given. The volunteers should be divided into different groups and committees and the role of each committee and group should be defined to avoid over-lapping.

2.2 Guidelines for the success of Camp

(a) Selection of proper projects:

The selection of proper projects for special camping programme can boost the morale of the campers and develop in them a sense of achievement. Hence, it is essential that suitable projects must be selected with utmost care. While identifying the projects/activities in special camping programmes, the following criteria may be kept in mind:

- (i) The needs of the locality;
- (ii) Facilities available in the area;
- (iii) Local participation;
- (iv) Possibility of completing or developing the project in 10 days and
- (v) Possibility of follow-up action in Regular Activities.

(b) Personality Development:

As the NSS aims at camps should be designed to achieve this objective. Groupwork, team-building, community dynamics, leadership, communication skills and creativity should form part of special camps. In developing the personality of student youth, therefore special necessary, a few camps may be developed exclusively for the purpose involving key NSS volunteers.

3. Importance of successful camping programme

Special camps are considered as training grounds to train the educated citizens of tomorrow to undertake the responsibility of national reconstruction. Therefore, it is of utmost importance that the NSS volunteer who is the main participant in the whole programme draws sufficient strength and experience to play his/her role in the society. Successful camps organised with specific projects and motivation can prove a source of strength and inspiration for him/her and encourage him/her to play a positive role in the emerging society.

4. Guiding Principles

(a) The camp should provide an environment conducive for democratic and cooperative way of life. It must encourage the NSS volunteers to participate and cooperate in camp life.

(b) Special camps also aim to promote the spirit of self-reliance and self-disciplined way of life in society. Major emphasis should be on the fact that the NSS volunteers should direct their behaviour themselves under the guidance of the Programme Officer. The entire work of organising and running the camp e.g. clearing of the site, pitching of tents (wherever necessary), provision of sanitary services and recycling of human and vegetable wastes, cooking and serving food etc. ought to rest on the shoulders of the participants. As some of the students who participate in the camps are not trained for these elementary tasks, there should be a group of trained volunteers which can be shifted from camp to camp to provide this training.

(c) The NSS volunteers should be able to identify themselves with the community. The gap between the poor and rich and educated and illiterate is widespread in the society.

Hence, our effort should be to bridge this gap by taking the NSS volunteers to the village to provide with opportunities to understand the community, its problem and possible solutions. An earnest effort should be made so that NSS volunteers relate themselves with the community, and not remain alienated individuals. It should be ensured that there is no discordance with the general standards of living of the areas. The task of developing a feeling of relation with the community for seeking whole-hearted cooperation of local youth, should be understood as the most vital task in the camp

5. Organisation of camp

(a) Each camp will have 1-2 teachers and 2-5 student leaders who will work as camp organizers/work supervisors. Each camp may consist of a minimum of 40 and maximum of 50 participants depending upon local needs.

(b) Active participation of local student and non-student youth (up to 10% of the camp strength) may be ensured. This can be done through suitable cultural and educational programmes, through dance, drama, music etc. undertaken in the evenings in cooperation with the local peoples.

(c) The NSS Programme Officers should ensure adequate representation of students belonging to SC/ST and minority communities, so that young person's belonging to these communities feel fully involved in the development of the country.

(d) Female NSS volunteers should be encouraged to participate in the camps organised by the co-educational Institutions.

(e) Students from foreign countries may also be involved in the NSS camps, if possible.

6. Administration of the Camp

(a) Maximum number of NSS volunteer leaders and teaching community of the institution may be involved in conducting the camp.

(b) All NSS volunteers participating in the camp should be divided into different groups. Each one will undertake activities according to one's aptitude, educational qualification and skill. For example, one team can take up mass immunization against preventable diseases, another team can look after environmental sanitation and popularization of Gobar Gas Plants; yet another team can concentrate its work on provision of potable water or other activities chosen by the institution etc. each group may have a few local non-student youth so as to ensure local support on voluntary basis, and to ensure proper follow-up to the programmes during the term time.

(c) The management of the camps may be done through Committees which take care of various aspects of camp life. Punctuality and discipline should be emphasised. All the participants including the teachers should strictly abide by the camp rules and stay in the camp. It is suggested that the following Committees may be formed for running the camp:

(i) Mess Committee : It will look after the food arrangements of the camp

(ii) Programme Committee : To conduct the day-to-day activities of the camp

(iii) Project Committee : To take care of the project work including supply of tools and equipment.

(iv) Cultural Programme Committee : To arrange the cultural programmes in the way that all participants get opportunity to show their skill and talent. Group performance may be given preference over individual performance.

(v) General Discipline Committee : It will look after the discipline in the camp.

(vi) Reception and Guest Committee : It will look after the guests in the camp, and make necessary arrangements for their arrival and departure.

7. Duration of the Camp

(a) The NSS camp will be of 7 days duration. The NSS volunteers are expected to be in the camp throughout the period, including on the inaugural day and depart from the camp only on closing day after valedictory function.

(b) Camps beyond 7 days may be organised by the Institution, subject to the condition that no additional finance will be made available. The additional expenditure may be met by exercising economy in the camp expenditure. The camp may be extended by five days over and above the mandatory period of 7 days.

(c) In case an important project has been undertaken and it remains incomplete and it is very essential to the community, the NSS units may plan to organise a second camp to complete the project.

8. Lodging Arrangements

(a) The lodging arrangements of the camp should be made in a building of the village or Panchayat school.

(b) In case of non-availability, a community building like Panchayat house etc. should be utilized for such purpose, with the consent of the influential people of the village.

(c) No camp should be held in the premises of the college/school. The NSS volunteers must reside in the adopted area where the camp is being held.

(d) Generally, slums in metropolitan cities are not convenient for the students to stay overnight during the project. In such cases, the arrangements for stay should be made in the institution itself (the colleges and schools are expected to adopt nearby slums). However, where this is not possible, 'Day Camp' can be organised. This provision is only for Urban Units, who find it extremely difficult to get suitable accommodation for campers. The approval of the Programme Coordinator may be obtained in advance for organising 'Day Camps'.

9. Board Arrangements

(a) The mess should be managed by Mess Committee. The practice of giving the responsibility of food supply to a contractor should be avoided.

(b) Food in the camps should be simple but balanced. It should be at minimum cost and as far as possible, prepared out of locally available materials. Meals should be carefully planned with the assistance of such institutions and individuals having knowledge of food and nutrition as may be available in the State. The participants should also be explained about meal planning as an educational lesson; and its propagation among the local community should be an important extension activity of the campers.

(c) It should be ensured that the food served in the camp is not very much different from the general standard of the villagers living in the area.

10. Project Work

(a) The projects should be selected as per the guidelines, after identifying the needs of the village/slums. No project should be undertaken, which is irrelevant to the needs of the village/slum.

(b) The project should be approved by the competent authority to avoid conflict at later stages.

(c) The availability of the materials/equipment's and technical advice may be ensured in advance for the success of the project.

(d) All efforts should be made to complete the project during the camp period itself. Every precaution should be taken not to leave the project incomplete.

11. Involvement of the Community

Every effort should be made to involve the local people in project work. It must be explained that the work is for their benefit and therefore, they should contribute to it. If all the physical effort is done only by the students then the village population may feel that the students are doing it to get a degree or some such benefit. The object of the programme should, therefore, be to involve the village population actively in rural welfare programmes and make them see that, by their own coordinated efforts, they could live a better and richer life.

12. Camp Programme

(a) It is very essential to prepare a suitable schedule for the camp, so that it helps to develop a sense of discipline and devotion among the campers. As the camp is an occasion for establishing rapport with the community, it should not be treated as a picnic or excursion.

(b) No uniform schedule of activities can be suggested for a work camp due to considerable variety in the scope and content of the projects, the NSS units should ensure that various activities undertaken during the camp are so planned and organised that it ultimately leads to fulfillment of the objectives of holding a camp. In addition to some manual work, the camp should provide opportunity for community, living, discussion in group and cultural activities etc. A good camp can adopt the following daily schedule of important activities:-

- (i) Manual work for accomplishment of the project like construction of small village complex, sustainable development activities like laying out gardens, tree plantation etc. or any other project depending on local needs and priorities. : 5 Hours
- (ii) Discussion on topics like freedom struggle, characterbuilding, development of culture, family welfare, health and hygiene, national integration, eradication of social evils like casteism, regionalism, dowry, untouchability, alcoholism, corruption, gambling and superstitions, civil, social and national responsibilities of citizens, small savings, improved agricultural practices etc. : 2 Hours
- (iii) Cultural programmes/community singing in the evening : 2 Hours

It is advisable that during the course of discussions on various topics and the cultural programmes – maximum number of villagers/residents (irrespective of their age) are provided an opportunity to benefit from such discussion and cultural programmes. If some of them are unable to participate in the manual work, but are interested in discussions and cultural programmes, this may be encouraged. Cultural programmes, may, as far as possible, be of educative value with social messages. Efforts should be made to get some documentary films on development issues screened for the benefit of the community.

(c) It has been decided that as a part of the camp, the students should be taken to nearby projects with a rural development content like IRDP, NREP, ICDS, midday meals, adult literacy, village roads and sanitation, rural cooperative housing activity, dairying and animal husbandry, social forestry, soil and water conservation projects, and monuments of historical importance, to educate them about the cultural heritage as well as economic and technological advancement of the country. It would be necessary to spend a day for this purpose by economizing on the budget provided for Special Camping Programme and extending the duration of the camps by 1 or 2 days. Effective coordination has to be made with State Government and District Authorities to get all assistance in this regard.

13. Suggestive Model Schedule

Waking Up 0500 Hrs.

Morning Assembly and Physical Exercises 0600 Hrs. to 0630 Hrs.

Break Fast and Collection of tools etc. 0630 Hrs. to 0715 Hrs.

Project work 0730 Hrs. to 1230 Hrs.

Personal Hygiene 1230 Hrs. to 1300 Hrs.

Lunch 1300 Hrs. to 1400 Hrs.

Rest 1400 Hrs. to 1500 Hrs.

Talks by eminent visitors followed by discussion 1500 Hrs. to 1700 Hrs.

Community visit 1700 Hrs. to 1930 Hrs.

Recreation and socio-cultural programme 1900 Hrs. to 2000 Hrs.

Dinner 2000 Hrs. to 2100 Hrs.

Review of Day's Work 2100 Hrs. to 2130 Hrs. 13 Light Off 2200 Hrs.

14. Home Stay

In order to promote Inter-faith, Inter-community and Inter-personal understanding, some universities and NSS Units have experimented with the concept of Home Stay by placing NSS volunteers for a few days, volunteer (s) of one religion or community in a local family belonging to a different faiths and communities. This experiment has worked out well and has great educational value. During each special camp, certain number of willing student may be encouraged to undergo this experience for 2/3 day in a host family and share their experiences with the rest of the campers.

15. Joint Camps and State Level Camps

(a) Joint Camps: It has been experienced that joint camps involving more than one Institution are not as good as the camps of individual NSS Units in terms of performance. Often joint camps require joint responsibilities and these lead to difficulties in accountability for various things, besides creating difficulties in accounts. The only purpose served by joint camps is that a greater number of Institutions can be involved in the camp. But in this process the performance of each NSS Unit gets diluted. Further, follow up of the programme is also not possible in a joint manner. Hence, it is now decided that joint camps should not be permitted.

(b) State level Camps: While each NSS Under would undertake a project under the Special Camping Programme during vacations depending on the local needs and priorities, some projects

of national or regional importance may be undertaken at State level during vacations every year. The State Liaison Officer may coordinate and execute such projects with select volunteer representatives from various NSS Units within the approved pattern of special camping.

16. Publicity

Adequate attention should be given for proper publicity of the camps planned/organised at the State/University/College/School and village levels to create an awareness of the importance of this programme in the process of rural reconstruction and development. The programme should be publicised through the Press, Radio, Television, documentaries and other mass media. Information and Public Relation Departments of State Governments should also be requested for assistance in this regard. At the college/+2 level, each NSS unit may prepare a few posters/charts on the campaign in the regional language and display them at suitable places in the village/slum areas to make the desired impact.

Unit II Social Awareness

Social services are a range of public services intended to provide support and assistance towards particular groups, which commonly include the disadvantaged. They may be provided by individuals, private and independent organizations, or administered by a government agency. Social services are connected with the concept of welfare and the welfare state, as countries with large welfare programs often provide a wide range of social services. Social services are employed to address the wide range of needs of a society. Prior to industrialization, the provision of social services was largely confined to private organizations and charities, with the extent of its coverage also limited. Social services are now generally regarded globally as a 'necessary function' of society and a mechanism through which governments may address societal issues.

The provision of social services by governments is linked to the belief of universal human rights, democratic principles, as well as religious and cultural values. The availability and coverage of social services varies significantly within societies. The main groups which social services is catered towards are: families, children, youths, elders, women, the sick and the disabled. Social services consists of facilities and services such as: public education, welfare, infrastructure, mail, libraries, social work, food banks, universal health care, police, fire services, public transportation and public housing.

What Are Basic Social Services?

Basic social services are those that are integral to health and wellbeing. They allow people to live and function and would be considered the basic necessities of life. The international organization UNICEF provides the following social service example for “basic” social services in relation to the needs of children:

- Primary health care
- Basic education
- Clean water
- Proper sanitation

Most government agencies take a somewhat broader view of basic social service programs, and they will typically include components that help in multiple facets of life.

An example of social service basic needs are:

- Food & water
- Shelter
- Health care
- Safety
- Mental health assistance
- Financial assistance for basic needs
- Employment assistance

Characteristics

The term ‘social services’ is often substituted with other terms such as social welfare, social protection, social assistance, social care and social work, with many of the terms overlapping in characteristics and features. What is considered a ‘social service’ in a specific country is determined by its history, cultural norms, political system and economic status. The most central

aspects of social services include education, health services, housing programs and transport services. Social services can be both communal and individually based. This means that they may be implemented to provide assistance to the community broadly, such as economic support for unemployed citizens, or they may be administered specifically considering the need of an individual - such as foster homes. Social services are provided through a variety of models. Some of these models include:

The Scandinavian model: based on the principles within 'universalism'. This model provides significant aid to disadvantaged groups such as people with disabilities and is administered through the local government with limited contributions from non-governmental organizations.

The family care model: employed throughout the Mediterranean, this model relies on the aid of individuals and families which usually work with clergy, as well as that of NGO's such as the Red Cross.

The means-tested model: employed in the UK and Australia, the government provides support but has stringent regulations and checks which it employs to determine who is entitled to receive social services or assistance.

Recipients

Social services may be available to the entirety of the population, such as the police and fire services, or they may be available to only specific groups or sections of society. Some examples of social service recipients include elderly people, children and families, people with disabilities, including both physical and mental disabilities. These may extend to drug users, young offenders and refugees and asylum seekers depending on the country and its social service programs, as well as the presence of non-governmental organizations.

NGOs: Role and Contribution

NGOs are non-governmental organizations that function free from the control of the Government. They are non-profit bodies that work for the Welfare of the society. They act as a middle organization between the Government and the society. People who cannot see the suffering of other individuals and want to make a better place for everybody, usually participate in these organizations. When various issues cannot reach the Government in power or when some issues are looked down upon by the Government then NGOs take up these issues and tackle them with utmost priority. Anyone can become a member of these organizations and can also quit whenever they want to. NGOs have their own set of rules and procedures for selection as well. That is why these bodies are also known as voluntary functioning bodies. They are identified on the basis of their work and according to the level on which they operate.

On the basis of their work, they are classified as

- Service-Oriented NGOs,
- Charity Oriented NGOs,
- Empowerment Oriented NGOs and
- Participation Oriented NGOs.

On the basis of the level of operation, they are classified as

- Community Based Organizations,
- City Level Organizations,
- National Level NGOs, and
- International Level NGOs.

Role and Functions of NGOs in the Indian context:

NGOs have brought various social changes for the promotion and development of society. These organizations work for serving humanity and other good cause. Let's discuss some of the major roles played by the various NGOs:

- 1) **Improving Government performance:** It is one of the important works of the NGOs to ensure that the Government should be responsive and solve the problems of the citizens thereby making the Government more accountable. NGOs also help in providing suggestions and their expertise in matters related to policy-making of Government by providing research teams. Many path-breaking laws in the country like Environmental Protection Act 1986, Right to Education Act 2009, Right to Information Act 2005, etc. have been formulated with the initiatives of the NGOs.
- 2) **Acting as a social mediator:** People in India are influenced a lot by faith, superstitions, belief, and customs. NGOs act as social mediators at various different levels of society so as to bring the required change in social and behavioral attitudes prevailing within the social environment. They create awareness among people and become the voice of the poor and needy person or group.
- 3) **Facilitating communication:** NGOs work at two different levels in order to facilitate communication. One is at the upward level whereby NGOs inform the Government about the needs, abilities, and activities of the people in their local area. On the other hand, they work at the downward level where people are informed and educated about the policies and programs of the Government.
- 4) **Acting as a pressure group:** They also act as a pressure group and mobilize public opinion against various Governmental policies and activities. They also help poor people, Farmers, STs, SCs etc. in availing quality services by making the Government accountable.
- 5) **Building Community Participation:** NGOs encourage and facilitate the participation of disadvantaged communities and help in preserving the culture of diverse communities.
- 6) **Women Empowerment:** The role of NGOs in women empowerment cannot be denied. They have been constantly fighting against social evils like Sati, dowry, cruelty, and other causes like employment, lessening of female foeticide, etc. Various NGOs like the Agrani foundation, Eklavya, Sewa, etc. have been trying to achieve gender equality as far as possible.
- 7) **Mobilising Local Resources:** Over utilization of natural resources lead to natural calamities and environmental threats. NGOs keep an eye on this particular domain so that the destruction of natural resources does not take place.
- 8) **Providing Education, Training, and Technical Assistance:** NGOs provide education, training, and technical assistance to the people in need, volunteers, and to other NGOs. Later on, the trained NGOs provide their services to assist the Government.
- 9) **Bridging the gap:** NGOs reach out to those sections of people who are often left untouched by the State projects. For example, during the Covid-19 crisis, aid was

provided to migrant workers. Apart from this, NGOs are also engaged in activities like education, human and labor rights, legal aid, gender issues, healthcare, and even research.

10) Monitoring and evaluation: NGOs monitor and evaluate government policies and activities that encourage active people's participation in the developmental process. This also results in keeping a check on the administrative functions of the Government.

Note: NGOs work both at the National and International levels and so far have contributed a lot to the development of society. These bodies set an example that humanity is still alive. They are free from any kind of biases or social evils. Whenever Government is unable to fulfill its responsibilities, these organizations are there to help it. They have been successful in bringing the attention of the government to issues like participation, equity, illiteracy, poverty, unemployment, etc. Government should appreciate the role and functioning of the NGOs as they have always provided much-needed support to it in order to achieve its targets.

Civic responsibility – causes and prevention

Fundamental Duties of Indian Citizens are listed in the Constitution of India. The Constitution was formed on the 26th of November in 1949 by the Constituent Assembly and came into force on the 26th of January 1950. Each and every citizen of India has to follow and practice these Fundamental Duties. The Fundamental Duties of Indian Nationals are mandatory for all the inhabitants of the country.

The Fundamental Duties of the citizens of India mentioned in Article 51A of the Indian Constitution. The various Fundamental Duties of Indian Citizens mentioned in the Indian Constitution include the following points:

- To abide by the Constitution and respect its ideals and institutions, the National Flag and the National Anthem.
- To defend the country and render national service when called upon to do so.
- To uphold and protect the sovereignty, unity and integrity of India.
- To develop the scientific temper, humanism and the spirit of inquiry and reform.
- To cherish and follow the noble ideals which inspired our national struggle for freedom.
- To promote harmony and the spirit of common brotherhood amongst all the people of India transcending religious, linguistic and regional or sectional diversities; to renounce practices derogatory to the dignity of women.
- To strive towards excellence in all spheres of individual and collective activity so that the nation constantly rises to higher levels of endeavour and achievement.
- To safeguard public property and to avoid violence.
- To protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.

Need & Importance of Fundamental Duties

In case there is a violation of fundamental duties, Article 51A of the Constitution categorizes it as contempt of the constitution which is punishable under the Prevention of Insults to National Honour Act, 1971.

It is easy to assume that constitutional duties are similar to the fundamental duties of the Indian citizen. The Indian Constitution provides a list of fundamental rights and duties to the citizens and lays down the State's duties toward ensuring that these rights are protected and provided equally to everyone.

These duties were drafted on the lines of moral, ethical, and cultural code of conduct which is to be followed by the people to uphold and protect the sovereignty, unity, and integrity of our country. It also helps the government in maintaining proper governance and enabling the proper functioning of a democratic society.

Reasons for Making Fundamental Duties Non-Enforceable

Practically speaking, it was a wise decision to make fundamental duties non-enforceable, especially when the Directive Principles of State Policy in the Constitution, have been made non-enforceable as well. In fact, the reason for not making these duties enforceable is because the majority of the population being illiterate in India, many are unaware of their Constitutional obligations. In this scenario, if the fundamental duties were enforced, it would have resulted in causing chaos and harassment among people.

Also, implementing these elemental duties would have been tough, as the Fundamental Duties mentioned in Article 51A, lack proper explanation and for different people, these duties are liable to be interpreted in many different ways. Moreover, the fundamental duties enlisted is wholly dependent on the performance of the State and the Directive Principle of State Policy. If the State is unable to provide a proper climate that elaborates on the fundamental duties, then to follow these duties properly will pose a real problem. These duties are not legally enforceable, which means that if a citizen of India violates any of them, no legal action can be taken against him/her.

Although these duties are non-enforceable, they are important because:

- These duties are a constant reminder to citizens to build a free, healthy, and responsible society and they are expected to not act as recklessly and not indulge in anti-social activities.
- For the growth of a democratic country like India, it is imperative that all fundamental duties are followed by the citizens while respecting the integrity and promotion of cultural harmony in the country.
- These duties of an Indian citizen provides education to children, especially to children below 14 years of age, safeguards the human rights, and is a major step towards the abolition of social injustice that is prevalent in the society today.
- Environmental pollution has become a great cause of concern, not only for Indians but for humanity around the globe. Unless we all take the pledge to keep our environment free from pollutants, there remains the threat of undesirable consequences.

The 11 fundamental duties are not merely the expression of morals or religion, as the courts can take cognizance in the matter to enforce and give effect to these constitutional obligations. Under

Article 51A and as per the definition of fundamental duties, it's the responsibility of the citizens to build a free and healthy society, where all citizens are treated equally.

Fundamental Duty is the Responsibility of the Citizens

There was a judgment by the Supreme Court which said that if someone had genuine religious obligations that can be placed above patriotism then no one can force them to sing the National Anthem.

It is a citizen's responsibility to realize that it is in their own interest to perform their duties and discharge their 134 legal and constitutional obligations whole-heartedly because only by doing so, individually, can they help the growth of the democratic republic collectively. Citizens are expected to behave in accordance with the ideal code of conduct parallel to the 11 fundamental duties and no legal action can be initiated for non-performance. With the independence of India, dawned the "Ganatantra Raj", which made each of us responsible for the happiness and welfare of our people.

The Relationship between the Fundamental Rights, Directive Principles and Fundamental Duties

The Indian Constitution provides different sections of Fundamental Rights, Fundamental Duties and Directive Principles of the State Policy to regulate the conduct of citizens among each other, and the state's conduct with the citizens. These different segments of the Indian Constitution provide a rule book of rights, duties, and guidelines for citizens' behavior and conduct along with the parameters with which the government has to keep itself fully aligned while making laws.

- The ***Fundamental Rights*** are defined as the basic human rights of all citizens. **Part III** of the Indian Constitution contains all the fundamental rights applicable to all the individuals irrespective of race, religion, caste, creed or gender or place of birth. All these rights are enforceable by the courts, subject to specific restrictions. The basic idea behind formulating these Fundamental Rights is to protect the liberty of citizens and to maintain the social democracy of the country based on the factors of equality in society.

Fundamental Rights are Right to Equality, Right to Freedom, Right against Exploitation, Right to Freedom of Religion, Cultural and Educational Rights, Right to Constitutional Remedies and Right to Privacy.

- The ***Directive Principles of State Policy*** serves as guidelines for the government to incorporate while framing the laws. These principles are enshrined in **Part IV** of the Indian Constitution set forth the fundamental guidelines for the State to apply in framing, enacting and passing laws establishing a social, economic democratic nation.
- The ***Fundamental Duties*** have been defined as the moral obligations of all the citizens to help promote the welfare of the country and to uphold the unity of the nation. These duties are set out in **Part IVA** of the Indian Constitution concerning the individuals and the nation. Just like the Directive Principles, these duties represent guidelines that the citizens should obey for the welfare of a democratic nation.

The Directive Principles of State Policy have been used to lay down the guidelines and principles to achieve social equality, economic equality, and educational upliftment. The relationship between the Fundamental Rights, Duties and Directive Principles can be understood as a method for attaining the national peace, security, and welfare.

Role of Youth

Youth is the most important and dynamic segment of the population in any country. It is believed that developing countries with large youth populations could see tremendous growth, provided they invest in young people's education, health and protect and guarantee their rights. We can undoubtedly say that today's young are tomorrow's innovators, creators, builders and leaders. But they need the required support in terms of good health and opportunities skills to transform the future. The economic trigger happens when a country's more hands to work available than more mouths to feed. To put it succinctly, the working-age population has to be larger than the dependent population.

India's Development is in the Hands of the Young People

Almost 34 per cent of the Indian population consists of youth. They have the power to change the nation. The young mind will be more fresh and innovative which helps in the progress of the country. But adequate opportunities should be given to the youth to represent their ideas and policies for the upliftment of the nation. The only way to express the ideas and to implement their policies in politics. Young people should be motivated to take part in politics and to occupy high positions such as Prime Minister, Governor and Chief Minister.

Youth can be an Antidote to Bad Governance and Corruption

They have the power to change. Education programs should aim to teach and young minds right from the school level the importance of choosing the right people who would take charge of governance. Conventionally, youth have been asked to keep away from politics. Youth should be motivated to consider politics as a means to serve the nation. They should be oriented on anti-corruption drives with a focus on prevention, education, and strategies for fighting corruption. Good governance is realistic with youth empowerment.

It is therefore important to acknowledge the role of civil societies in empowering youth towards strengthening of the democratic system of the country. The solution lies in effectively utilizing modern tools in disseminating the belief among youth on their participation and representation in democracy through civil society initiatives.

Youths are Problem Solvers

Our nations need them to resolve most of our problems. The nation is facing a lot of problems, and I believe that youths are capable of solving them. They just need to be given a chance to prove themselves. Youths have the power to unite individuals in the six ethnic group. Racism is an ongoing issue around the world. Individuals are fighting against each other because of the complexion of their skin and the texture of their hair.

Religion is another issue, the youths can convince their fellow man to live in peace and love. All of us are one and we should not allow these little differences to push us away from each

other. There also a lot of crime taking place. Women are being killed by their abusive husbands. Person's homesbusinesses, are being broken into. All of this crime and violence needs to stop. The youth once more has the ability to bring about a change in their country.

Youths seem to have the ability to face any challenges and problems. They have a positive influence on their fellow young people. They are able to teach them the positive things in life. The ones who are destroying their future, tend to listen to their fellow youths. They will make them understandthe importance of a good education.

The wise youths that we have out there should be taken into consideration. Some of them, though educated are unemployed. They should be given an opportunity to expose their intelligence to the world and make themselves into someone. Some organisations and other firms should assist the youths; so they can make our land a great and educated one. They will make a huge difference in society and the entire world. The youths are our life and nation. They will make our country proud. The country will be recognized. The youths just need support from their fellow citizens and they will perform their duties

The role of the youth in nation-building is crucial. They are problem solvers, have a positive influence on other young people and the nation, and are extremely ambitious. They have the ability to create an identity for themselves and move the nation forward. However, they will not be able to do this without the support of their Government and fellow youths. So the youths can make their beautiful land flourish and shine in success.

Drug Abuse and Trafficking

India has a long and interesting history when it comes to drugs. From Vedic times, Cannabis, popularly known as Marijuana has been used for various medical purposes and religious ceremonies and festivals. In fact, it is one of the five sacred plants mentioned in the Vedas and was known as 'Vijaya'. Interestingly, Lord Shiva was also known as Lord of Vijaya, and his followers to this day, smoke Ganja or have Charas to reach a trance-like meditative state. In 330 BC Alexander the Great introduced opium to the people of India and once again it was widely used for its medicinal properties. From the Mughal Era onwards, opium became a popular and widely used recreational drug. The British East India Company assumed total control of opium cultivation and began trading it where it was legal and smuggling it where it was illegal.

So lucrative was this business of drugs that the British colonial rulers forced large-scale conversion of paddy fields into poppy cultivation in the region of Bengal. This led to "The Great Bengal Famine" of 1770 that caused the deaths of 10 million people in the region. Less than 70 years later the Opium Wars took place when China attempted to suppress the opium trade which was being illegally exported from India to China by foreign traders- primarily the British. Millions of Chinese were addicted to opium and the Qing Dynasty wanted to curb this problem, however, for the British colonial rules it was a lucrative market that was waiting to be exploited.

The Changing Nature of Drugs in India

India's history shows that her people were tolerant towards the use of drugs like Charas and Ganja. It was never seen as an evil that needed to be uprooted. However, times have changed. Today smoking cannabis is in the same league as smoking tobacco. It's the synthetic drugs that are now ruling the markets world over, India included.

Today the most popular drugs are synthetic drug varieties like Amphetamine and Methamphetamine. Designer drugs like MDMA, Ketamin, GHB, Rohypnol, etc. are popular party drugs. Also, apart from the ever-popular opium and morphine which come under the category of narcotics, a wide variety of hallucinogens like Lysergic Acid Diethylamide (LSD), Dimethoxy Methylene Amphetamine (STP), DimethylTryptamine (DMT), Mescaline and Phencyclidine (PCP) are also smuggled into India.

Recreational drugs are more dangerous, harmful and at times even deadly. These drugs not just ruin lives but also have the power to destabilise governments and create international conflicts. Millions upon millions of lives are now at stake.

What is Drug Trafficking?

Drug trafficking can be defined as a global illicit trade involving the cultivation, manufacture, distribution and sale of substances which are subject to drug prohibition laws. Drug trafficking is often associated with other forms of crime, such as human trafficking, terrorism, slave trade, illegal organs trade and money laundering.

Nearly 70% of these narcotics and drugs are trafficked over land using various modes of transportation and the country's borders are the first point of contact for drug trafficking. With the help of the poor, uneducated Indians living on the borders of India, traffickers are able to move these illegal drugs with ease. Drug traffickers are now increasingly using the sea routes both on the east and west coast of India, as patrolling on land becomes more vigilant. The Bay of Bengal, the Rann of Kutch, the Mumbai port are all important points for entry of drugs in the country. Air routes although risky are used by the traffickers to smuggle various drugs through personal carriers, postal services, etc. Delhi and Mumbai continue to remain the most important airports from where drugs are smuggled internationally. Every year maximum quantities of drugs are seized at these two airports.

Drug Trafficking Patterns and Routes in India

India's proximity to the Golden Crescent and Golden Triangle (the major opium production regions in the world) has made India a hub of drug trafficking. Drugs arrive into India from Afghanistan, Iran, Pakistan, Thailand, Myanmar, Bhutan through its shared borders with these countries.

Depending upon the nature and geography of the border, as well as the production, demand and supply of drugs, different borders have different trafficking patterns.

General global pattern of the flow of illegal drugs showcases that among all drugs, heroin and cocaine are trafficked for much longer distances while hashish is smuggled for a

comparatively shorter distance. Marijuana/Ganja and psychotropic substances like Amphetamine Type Stimulants (ATS), which are widely popular and consumed locally travel the shortest distance among all drugs.

Drug Trafficking Through the Golden Crescent

‘Golden Crescent’, is the name given to one of Asia’s two main areas of illicit opium production (the Golden Triangle is the other hub), located at the crossroads of Central, South, and Western Asia. This region overlaps three countries, namely Afghanistan, Iran, and Pakistan. The mountainous terrains that form the borders of these countries are the reason why it is called the crescent.

Heroin and hashish produced in the ‘Golden Crescent’ region are trafficked into India through the border states of Gujarat, Rajasthan, Punjab and Jammu and Kashmir. The most preferred route has been the Thar desert as it has been a traditional route from the time of the Chinese Colonial Era. The desert is vast and poorly guarded and has ample hideout spots. Drugs are smuggled in from across the border on camel backs and once the consignment reaches the collection centre, it is transported to other major cities by vehicles. In addition to these traditional routes, the Thar Express plying between Jodhpur and Karachi and the Samjhauta Express plying between Old Delhi and Lahore junction have been reported to have become major carriers of drugs.

The reason Punjab has such a huge drug addiction problem is that it is transit as well as a destination point for heroin manufactured in the Golden Crescent region. Moreover, heroin smuggled in through Punjab and Rajasthan is shipped to Mumbai and Tamil Nadu from where it is trafficked to international markets. Also, terrorist organisations in Jammu and Kashmir, help the movement of heroin in India through the Jammu sector which ultimately reaches Mumbai through Pathankot-Gurdaspur-Amritsar-Faridkot Jaisalmer/Barmer-Ahmedabad route.

With more patrolling along the land borders, drug traffickers are now using sea routes. The marshlands and creeks of Gujarat are progressively being used to smuggle heroin from Afghanistan-Pakistan region. Heroin is trafficked into the Rann of Kutch from Karachi in various country-made boats. Along the west coast of India, Mumbai is a major port through which drugs illegally enter as well as exit the country.

Drug Trafficking Through the Golden Triangle

‘Golden Triangle’, is the name given to the region where the borders of Thailand, Laos, and Myanmar meet at the confluence of the Ruak and Mekong rivers. This area covers approximately 950,000 square kilometres (367,000 sq mi) of mountainous areas of the three adjacent countries.

There is a two-way smuggling operation of narcotics and drugs through India- Nepal and India-Bhutan borders. Nepalese and Bhutanese cannabis is smuggled into India and pharmaceutical preparations containing psychotropic substances prescribed as painkillers and

anti-anxiety drugs such as diazepam, alprazolam, nitrazepam, lorazepam, proxyvon, buprenorphine, etc. are trafficked from India to Nepal and Bhutan.

Nearly 95% of the total opium produced in the Golden Triangle region is produced in Myanmar. Almost 80 to 85% enters the international market through Myanmar-Thailand route, the remaining enters India through the poorly guarded India-Myanmar border. From there it is trafficked through the Indian states of Mizoram, Manipur, and Nagaland.

The India and Bangladesh border has been vulnerable to the smuggling of various kinds of drugs ranging from heroin, marijuana/ganja, hashish, brown sugar, cough syrups, etc. There is a well-developed network of railways and river routes that has enabled the smuggling of pharmaceutical preparations containing dextropropoxyphene and codeine from India to Bangladesh. More often than not, drugs are trafficked across the border by individual carriers who largely consist of poor women and children employed by ruthless drug lords. As these individuals do not raise any suspicions, they can easily cross the borders undetected.

Over the last few years, sea routes are being used to smuggle consignments of heroin and ketamine to East and Southeast Asian countries like Malaysia, Singapore, Thailand, Taiwan and China. Seized consignments have been traced back to Chennai, Trivandrum and Calicut, signifying that drugs are being trafficked in large container vessels from these ports. Kolkata and Chennai ports are also being used to traffic Manipuri Ganja, and precursor chemicals to international markets.

Drug Trafficking Online and Through Dark Net

There is a significant rise in trafficking of drugs through the Internet especially through the darknet (portions of the internet that lie off the map, and is accessible only through special permissions and specific software).

“Illicit internet pharmacies”- particularly those on the darknet- are used to traffic drugs like cocaine, heroin, cannabis, methaqualone, and ketamine. There have been reports of over 1000 drug listings from India published across 50 online crypto-market platforms. This form of trading using cryptocurrencies has already spread across South Asia, including India. Cryptocurrencies like Bitcoin, Ethereum, Litecoin, etc. allow consumers to make electronic transactions by skipping the legal banking channels. This makes the detection of drug trafficking difficult.

Drug Trafficking and its Impact on Security of the Nation

India has been on the receiving end of terrorism since the 1970s and is among the top ten countries in the world affected by terrorist actions. Terrorism requires a lot of money and more often than not they are funded by drug trafficking operations. Not surprisingly, major opium/cannabis cultivation areas of the world are also home to terrorist organisations like the Lashkar-e-Taiba, Jaish-e-Mohammed, Al Badr&HizbulMujahideen, ULFA, Naxalites and Maoist.

Today, the three key trouble areas in India are Jammu & Kashmir, the eastern “Red Corridor” (the Naxalite–Maoist insurgency affected regions of Andhra Pradesh, Bihar, Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra, Odisha, Telangana, and West Bengal and eastern Uttar Pradesh states), and the hills of North-eastern India. Jammu & Kashmir has been facing the brunt of Islamist terrorist groups, the “Red Corridor” has been greatly troubled by the Left-Wing and the seven sisters of Northeast India by Tribal/Separatist respectively.

Tackling Drug Trafficking Problems in India

India has always taken a firm stand against drug trafficking and drug use. To that effect, the Narcotic Drugs and Psychotropic Substances Act (shortened to NDPS Act) came into force on 14 November 1985. Under the NDPS Act, it is illegal for any person to produce/manufacture/cultivate, possess, sell, purchase, transport, store, and/or consume any narcotic drug or psychotropic substance. The Act has been amended three times – in 1988, 2001, and 2014. The Act extends to the whole of India and it also applies to all Indian citizens outside India and to all persons on ships and aircraft registered in India.

To enable the full implementation of the NDPS Act, the Narcotics Control Bureau (NCB) was created on 17 March 1986. The NCB is the chief law enforcement and intelligence agency of India responsible for fighting drug trafficking and the abuse of illegal substances.

The NCB is aided in its efforts by the Central Bureau of Narcotics (CBN) and The Narcotic Control Bureau (NCB). Other key agencies that work closely in seizing and busting drug operations are Directorate of Revenue Intelligence, Central Bureau of Investigation, Customs Commission and Border Security Force.

These agencies are always there to control the drug trafficking problem in India, however, there is still a long way to go. We need stricter laws, stringent punishments and absolutely zero tolerance towards drugs.

What is the Prevalence of Drug Abuse in India?

In order to find the prevalence of drug abuse in India, a study was conducted by the Ministry of Social Justice and Empowerment (MoSJE). As per the 2019 report, 14.6% of the population uses alcohol. It is higher among men than women. It was found that 2.8% of the population uses Cannabis. This article covers the causes and harmful effects of drug abuse.

States with Highest Prevalence of Cannabis are

- Uttar Pradesh
- Punjab
- Sikkim
- Chhattisgarh
- Delhi.

India is sandwiched between the two largest Opium producing regions of the world that is the Golden triangle on one side and the Golden crescent on the other.

- The golden crescent area includes Pakistan, Afghanistan and Iran.
- The golden triangle area comprises Thailand, Myanmar, Vietnam and Laos.

What are the Causes of Drug Abuse?

Some of the causes behind drug abuse are listed below.

1. Family history of addiction
2. Mental health disorder
3. Peer pressure
4. Lack of family involvement
5. Early use
6. Taking highly addictive drugs.

What are the Different Types of Substance Abuse?

The 8 different types of substance abuse are listed below.

1. Alcohol
2. Cannabis
3. Opioids
4. Sedatives
5. Inhalants
6. Cocaine
7. Amphetamine Stimulants
8. Hallucinogens

What are the Harmful Effects of Drug Abuse?

The harmful effects of drug abuse could be short-term or long-term. It could have a direct or indirect impact. The effects also depend on the type of drugs used. Short-term effects are listed below.

1. Change in heart rate
2. Change in blood pressure
3. Heart attack
4. Stroke
5. Psychosis
6. Change in appetite

The long-term effects are listed below.

1. Heart disease
2. Lung disease
3. Cancer
4. AIDS
5. Hepatitis

The magnitude of Substance Abuse in India – 2019 Report

As per Magnitude of Substance Abuse in India 2019 report

1. 72 lakhs people need treatment for using Cannabis
2. 11 lakhs people need treatment for using sedatives
3. 60 lakhs people need treatment for using Opioids.

4. It was estimated there are around 16 crore alcohol consumers in the 10-75 years age group in India.
5. 5.7 crore people needed treatment for using alcohol.

Reasons for Drug Abuse

1. To be accepted by the peers
2. Increasing economic stress
3. Changing cultural values
4. Experimentation
5. Neurotic pleasure
6. Ineffective Policing

Drug Abuse – Negative Impacts

Some of the negative impacts of drug abuse are given below

1. Increase in diseases like HIV, Hepatitis B and C, Tuberculosis
2. Increase in violence
3. Economic potential gets wasted
4. Affects relationships with family, friends creating emotional and social problems
5. Increases financial burden
6. Women face domestic violence

India – Signatory of Various International Treaties and Conventions to Combat Drug Menace

United Nations General Assembly (UNGA) on 7th December 1987, decided that 26th June of every year will be recognized as the **International Drug Day** (another name for International Day against Drug Abuse & Illicit Trafficking).

India is a signatory of the following international treaties and conventions to combat the menace of Drug Abuse

1. United Nations (UN) Convention on Narcotic Drugs (1961)
2. United Nations (UN) Convention on Psychotropic Substances (1971).
3. United Nations (UN) Convention against Illicit Traffic in Narcotic Drugs and Psychotropic Substances (1988)
4. Transnational Convention Crime (2000)

Drug Abuse and WHO

WHO has played an important role within the UN system in addressing the world drug problem. WHO activities to counter the world drug problem can be presented under the following main dimensions:

- prevention of drug use and reduction of vulnerability and risks;
- treatment and care of people with drug use disorders;
- prevention and management of the harms associated with drug use;
- access to controlled medicines; and
- monitoring and evaluation.

Target 3.5 of UN Sustainable Development Goal 3 sets out a commitment by governments to strengthen the prevention and treatment of substance abuse.

Battle against Drug Abuse in India – Recent Developments

1. Government will roll out its Action Plan for 2020-21 known as **NashaMukt Bharat**.
2. The Focus of the plan will be to build treatment and drug de-addiction facilities in 272 districts identified as vulnerable based on access to drugs and prevalence of substance abuse.
3. The Action plan will be steered by the Ministry of Social Justice and Empowerment. (MSJE).
4. Among the 272 Vulnerable districts identified Uttar Pradesh has 33 vulnerable districts, Punjab (18 districts), Delhi (11 districts), Gujarat (8 districts) and Maharashtra (Pune, Mumbai, Nashik, Nagpur).

NashaMukt Bharat Action Plan 2020-21 – Ministry of Social Justice and Empowerment
The main components and 3 pronged strategies of NashaMukt Bharat are given below.

NashaMukt Bharat will focus on 3 pronged strategies, which are listed below.

1. Treatment through the Health Departments.
2. Outreach/Awareness by Social Justice
3. Narcotics Bureau

NashaMukt Bharat – Main Components of the Action Plan 2020-21

1. Awareness generation programs in University Campuses Higher Education institutions, and schools.
2. Building capacity for service providers
3. Focus on Treatment facilities in Hospital Settings.
4. Identification of dependent population and community outreach.

Awareness on HIV/AIDS

Human Immunodeficiency Virus (HIV)

HIV stands for Human Immunodeficiency Virus. It is the virus that leads to acquired immunodeficiency syndrome, or AIDS, if not treated. Unlike some other viruses, the human body can't get rid of HIV completely, even with treatment. So once a person gets HIV, currently, there is no cure for it.

What is HIV?

Human Immunodeficiency Virus (HIV) is a lentivirus, which is a sub-classification of the retrovirus. It causes the HIV infection which over time leads to AIDS (Acquired ImmunoDeficiency Syndrome).

- AIDS is a deadly condition in which the affected person's immune system fails, leading to the spread of life-threatening infections and cancers in his body.
- HIV demolishes a particular type of **WBC** (White Blood Cells) and the **T-helper** cells. This virus also makes copies of itself inside these cells.

- **T-helper cells are also known as CD4 cells.**
- The average survival period for a person affected with HIV without treatment is nine to eleven years, subject to the subtype of HIV.
- HIV infection can occur by the transference of blood, breast milk, vaginal fluid, semen, or pre-ejaculate.
- HIV occurs as both free virus particles and as a virus inside the infected immune cells within the above-mentioned bodily fluids.
- A weak immune system makes a person prone to opportunistic infections and cancer.
- It becomes difficult for a person infected with this virus to recover from even a minor injury or sickness.
- **By receiving treatment, a severe form of HIV can be prevented.**

Types of HIV

Type One	Type Two
<ul style="list-style-type: none"> • Most Common • Further categorized in 4 groups <ul style="list-style-type: none"> • Group M [Major] • Group N [Non-M & Non-O] • Group O [Outlier] • Group P <p>90% of the cases are caused by <i>Group M</i> HIV.</p>	<ul style="list-style-type: none"> • This is found primarily in Western Africa, with some cases in India and Europe. • There are 8 known HIV-2 groups (A to H). • HIV-2 is closely related to the simian immunodeficiency virus endemic in a monkey species (sooty mangabeys).

Difference between AIDS and HIV

AIDS	HIV
Acquired Immunodeficiency Syndrome (AIDS) is a disease.	Human Immunodeficiency Virus(HIV) is the causal factor (reason) for AIDS
Complications and secondary infections from this disease kill the host.	The virus is incapable of killing a host by itself.
AIDS is a condition acquired only after the contraction of HIV.	HIV is a virus and like other viruses, can spread from person to person.

HIV and AIDS (Prevention and Control) Act

The Government of India enacted the HIV and AIDS (Prevention and Control) Act under the Ministry of Health and Family Welfare in the year 2017 and was in force in 2018. The State and Central Government are responsible for the following measures:

- Preventing the spread of HIV/AIDS
- Providing ART (Anti-Retroviral Therapy) for infected patients

- Providing awareness about HIV & AIDS
- Conducting educational programmes about AIDS & HIV
- Prohibiting discrimination of infected patients
- Providing HIV treatment and counselling services under the state care facilities

The Act lists various grounds on which discrimination against HIV positive persons and those living with them is prohibited.

HIV and AIDS (Prevention and Control) Act maintain that without the consent of the person, no one can conduct any HIV tests or treatment related to HIV. Also, the person won't be under any compulsion to disclose his/her HIV status except when required by the Court. Informed consent for an HIV test will not be required in case of screening by any licensed blood bank, a court order, medical research, and epidemiological purposes where the HIV test is anonymous and not meant to determine the HIV status of a person. Establishments keeping records of information of HIV positive persons shall adopt data protection measures. The requirement for HIV testing as a prerequisite for obtaining employment or accessing health care or education is also prohibited.

In the case of violation of the act, the party disclosing information on a person with HIV or advocating hatred against them will be punished with a fine of one lakh rupees or imprisonment ranging from 3 months to 2 years.

Ombudsman Appointment under HIV and AIDS Bill

- An ombudsman will be appointed by each state government to inquire into complaints related to the violation of the Act and the provision of health care services.
- The Ombudsman shall submit a report to the state government every six months stating the number and nature of complaints received, the actions taken and orders passed.

Acquired Immunodeficiency Syndrome (AIDS)

Context

- India has achieved significant progress in containing the AIDS epidemic.
- The stigma faced by HIV positive patients is a relevant social issue

Background

- As per the latest HIV estimates report (2019) of the Government, India is estimated to have around 23.49 lakh people living with HIV/AIDS in 2019. The HIV epidemic has an overall decreasing trend in the country with estimated annual New HIV infections declining by 37% between 2010 and 2019.
- UNAIDS is working towards ensuring that 30 million people have access to treatment through meeting the 90-90-90 targets, whereby 90% of people living with HIV know their HIV status, 90% of people who know their HIV-positive status are accessing treatment and 90% of people on treatment have suppressed viral loads.
- National AIDS Control Programme (NACP), implemented by the National AIDS Control Organization (NACO) under the Ministry of Health and Family Welfare is the nodal programme for AIDS prevention, treatment and awareness generation. India is committed to achieving the 90-90-90 targets of UNAIDS.
- India has also declared recently its intention to provide free secondary treatment to all patients who require it.

- Even when only 0.27 % national prevalence is reported, vast regional disparities remain.
- The **India HIV Estimation 2019 Report** suggests:
 - Overall AIDS prevalence in adults (15–49 years) has declined in the country
 - Three states with the highest adult HIV prevalence are Mizoram, Nagaland, and Manipur
 - Nationally, there were an estimated 23.48 lakh PLHIV in 2019
 - In India, there were 69.22 thousand estimated new HIV infections in 2019
 - 58.96 thousand AIDS-related deaths were estimated in the year 2019

Government Initiatives

- After the detection of the first case in India in 1986, the Government of India established a National AIDS Control Program (NACP) which has now become the Department of AIDS under the Ministry of Health and Family Welfare
- The National AIDS Control Organisation (NACO) was established in 1992 as a division of the Ministry of Health and Family Welfare. It provides leadership to HIV/AIDS control programmes in India through 35 Prevention and Control Societies. NACO is the nodal organisation for the formulation of policy and implementation of programs for prevention and control of HIV/AIDS in India
- There are numerous Non-Governmental and Community Based Organizations (NGOs & CBOs) working on HIV/AIDS issues in India at the local, state, and national levels
- India receives technical assistance and funding from a variety of UN partners and bilateral donors

Way forward

- Region and state wise plans must be evolved to tackle the spread of new infections.
- New policies for AIDS infected children must be integrated with Integrated Child Development Services (ICDS) Anganwadi infrastructure and ASHA workers must be given special training.
- Drug users must be shown compassion by the law enforcement agencies and the Police must coordinate with the medical community to ensure that unsafe use of needles by drug addicts is checked.
- Due to the stigma faced by sex workers they are not able to get access to health counsellors, medical clinics, etc. There must be a comprehensive policy to tackle this.
- National Aids Control Programme (NACP) Phase IV aims to reduce new infections by 50 per cent and also provide comprehensive care, support and treatment to all persons living with HIV/AIDS.
- 2016 United Nations Political Declaration on Ending AIDS sets world on the Fast-Track to end the epidemic by 2030. India must ensure achieving its targets through sustained focused campaign with renewed vigour.

Unit III Natural Resources

Natural Resources are the wealth of the Earth. They are the raw materials available in nature and useful to human beings, animals and plants

Example Water, air land, plants, animals, coal, petroleum, minerals, forest, wood, etc.

Types of Resources

The natural resources are of two types, namely

1. Non-renewable resources
- 2 Renewable resources

1. Non-Renewable Resources

The non-renewable resources cannot be replaced after their use. They are available in limited amount. Eg Coal, petroleum, iron, natural gas, all mining products, etc.

Coal, petroleum, natural gas are called fossil fuels. They are found as deposits in the deep underground. They were formed by the decaying of dead animals and plants lived in the past.

They are found in limited amount in the world. So they will be depleted completely in the next few years.

2. Renewable Resources

Renewable resources are replenished after their use. They are available continuously.

Eg. Water, aquafood, forest, grassland, plants, animals, etc.

Plants are reproduced by reproduction. Similarly animals are produced by reproduction. Water is formed repeatedly by rains. Trees are produced by planting and replanting. So they are renewable.

Based on chemical nature, natural resources are classified into

1. Inorganic resources
- 2 Organic resources.

The inorganic resources do not contain carbon. They include air, water, minerals, sunlight, etc.

The organic resources contain carbon. They include coal, petroleum, natural gases, forest, aquafood, etc.

Certain resources can be repeatedly used. These resources are called Cyclic resources.

Eg Water can be used repeatedly. The water used in the industry comes out as industrial waste. It is purified and used again and again.

The natural resources may be abiotic or biotic resources.

Abiotic resources are non-living Eg Minerals, land, water, etc.

The biotic resources are obtained from organisms. They are organic in nature. Eg Forest, grassland, crops, animals, etc.

Natural Resource Conservation and Management

Natural Resource Conservation and Management refers to the safeguarding and management of natural resources such as land, water, soil, plants and animals, with a particular focus on how management affects both present and future generations. It deals with managing the way people and natural landscape interact; brings together land use planning, water management, biodiversity conservation, and the future sustainability of industries.

GEECS wide range of services in that field includes, but is not limited to:

- Management of national, regional and international projects and programs on ecosystem and protected area conservation;
- Coordination of wildlife, biodiversity and species activities in conservancies and natural landscapes through involvement of all conservation stakeholders;
- Policy and advocacy for the conservation and preservation of natural habitats such as forests, lakes, catchment areas, etc;
- Elaboration of conservation projects followed by their implementation, monitoring, mid-term and final evaluation;
- Facilitation of workshop and training seminars in the framework of biodiversity conservation projects/programs;
- Evaluation and reporting on the status of implementation of multilateral environmental agreements with particular focus on the Convention on Biological Diversity;
- Development of multilateral environment agreement National Action Plans (NAPs) as well as National Strategies (NSs);
- Assessment and monitoring of plant and animal Invasive and Alien Species (IAS);
- Management and/or control of established alien and/or native biological invasions, including stopping of new infestations and creating awareness on the fight and prevention of IAS and Evaluation of environmental, social and economic impacts of IAS.

Water conservation

Water conservation is the practice of an efficient usage of water by reducing unnecessary wastage of the same. The importance of water conservation becomes even more necessary as there is a limited source of freshwater that is beneficial for all human beings for a Healthy lifestyle. The freshwater available for use is unevenly distributed. Human activities are polluting the water sources threatening the survival of living beings. So, water conservation focuses on the concept of “save water and save a life”.

The Need for Water Conservation

It comes as no surprise that water is one of the most essential elements for the survival of any lifeform on the surface of Earth. The presence of water is what makes Earth different from any other planet. The need to maintain the constant flow of water comes from its vitality for the survival of all flora and fauna on the Earth.

Just because a portion of the human population has easy access to water resources, we keep forgetting why saving water is important. Saving water is not only a necessity for humans, our careless waste of water is also affecting the animals and plants around us. There are serious consequences of water depletion.

Water conservation methodologies:

- Rainwater harvesting
- Sustainable use of groundwater
- Recreation of traditional water sources
- Use of advance irrigation methods
- Flood management system
- Dam and reservoir construction
- Adopting water conservation habits
- Protection of water from pollution

Rainwater Harvesting

Definition: Rainwater harvesting is the simple process or technology used to conserve Rainwater by collecting, storing, conveying and purifying of Rainwater that runs off from rooftops, parks, roads, open grounds, etc. for later use.

Methods of Rainwater Harvesting:

The different methods of rainwater harvesting include:

- **Rooftop rainwater harvesting:** Rooftop Rain Water Harvesting is the technique through which rain water is captured from the roof catchments and stored in reservoirs. Harvested rain water can be stored in sub-surface ground water reservoir by adopting artificial recharge techniques to meet the household needs through storage in tanks.
- **Surface runoff harvesting:** Surface runoff water harvesting is the collection, accumulation, treatment or purification, and storing of storm water for its eventual reuse. It can also include other catchment areas from manmade surfaces, such as roads, or other urban environments such as parks, gardens and playing fields.
- **First, flush:** First flush is the initial surface runoff of a rainstorm. During this phase, water pollution entering storm drains in areas with high proportions of impervious surfaces is typically more concentrated compared to the remainder of the storm.
- **Transportation:** Transport generally marks the passage from one stage of the post-harvest system to the next. Transport, whether traditional or mechanized, is needed to move the agricultural commodities.
- **Catchment:** The catchment of a water harvesting system is the surface which directly receives the rainfall and provides water to the system. It can be a paved area like a terrace or courtyard of a building, or an unpaved area like a lawn or open ground.

- **Filter:** The filter is used to remove suspended pollutants from rainwater collected over roof. A filter unit is a chamber filled with filtering media such as fibre, coarse sand and gravel layers to remove debris and dirt from water before it enters the storage tank or recharges structure.

Advantages of Rainwater Harvesting:

1. Less of cost.
2. Helps in reducing the water bill.
3. Decreases the demand for water.
4. Reduces the need for imported water.
5. Promotes both water and energy conservation.
6. Improves the quality and quantity of groundwater.
7. Does not require a filtration system for landscape irrigation.
8. This technology is relatively simple, easy to install and operate.
9. It reduces soil erosion, storm water runoff, flooding, and pollution of surface water with fertilizers, pesticides, metals and other sediments.
10. It is an excellent source of water for landscape irrigation with no chemicals and dissolved salts and free from all minerals.

Solid Waste Management

The disposal of solid wastes from the environment is called solid waste management. The solid wastes include garbage, rubbish, agricultural wastes, industrial wastes, etc. Solid wastes seem to be pollutants when they are thrown elsewhere around us. If they are properly recycled, several useful materials can be made from them. Hence, It is said that waste is wealth.

They are managed by the following methods:

1. Landfill
2. Composting
3. Incineration
5. Pyrolysis
6. Reduction in use
7. Reuse.
4. Recycling

1. Landfill

Landfill is a solid waste disposal site where solid wastes are allowed to decompose in a safe way.

Landfill is a solid waste disposal site where solid wastes are deposited and covered. Municipal solid wastes, hospital wastes, camp wastes, animal wastes, plant wastes, sludges, soils, slurries, powders, dusts, etc. can be disposed off in landfills.

The landfill may be made above ground or below ground or above-below ground. Before filling, the site is lined with liners to prevent seepage and contamination of

ground water

When the filling reaches a thickness of 1.5m, it is covered with earth of 6 inches.

Like this many layers are dumped one above the other.

The wastes are decomposed by bacteria in 2 to 4 months.

The decomposed waste is reduced by 20 to 40% of its height.

Biogas (methane) produced during decomposition can be used for the generation of electricity

The landfill area can be used as lawns, gardens, play grounds, etc.

2. Composting

Composting is an aerobic microbial process which degrades organic matter into manure called compost. Composting generates manure from organic wastes. Compost contains nutrients and micronutrients. It disposes solid wastes. It is a biodegradable process.

There are 4 methods of composting. they are

1. Windrow composting
2. Aerated static pile composting
3. Mechanical composting
4. Vermicomposting

In windrow composting, the solid wastes are placed in long rows of almost triangular cross sections in open air (Windrows).

In aerated static pile composting, the wastes are laid on the floor of ventilating pipe system.

Mechanical composting is done in vessels.

Vermicomposting is the degradation of wastes by earthworms. It requires air and moisture.

3. Incineration

Incineration is the burning or combustion of wastes. The plant used for incineration is called incinerator. Incineration is an oxidation process. It is a method for disposing solid wastes. Enormous amount of heat is produced during incineration. This heat is used to produce steam from water. The steam is used to generate electricity.

4. Recycling

Recycling is the reprocessing of discarded wastes into useful products.

1. waste papers are ground into pulp and again used for the manufacture of paper.
2. cow dung is used in gobar gas plant to produce biogas for cooking and lighting.
3. garbage is decomposed to manure.
4. Solid wastes are incinerated so release heat. This heat is used so produce steam from water. the steam is allowed to rotate turbines to generate electricity.
5. Slaughter house Wastes and fish wastes are used to prepare feed for cattle.
6. Wood chips and saw dust are made into fuel
7. Glass pieces are melt and remade into bottles,

5. Pyrolysis

pyrolysis is the breakdown of solid wastes by heat in the absence of oxygen.

Pyrolysis is a greek term meaning fire and breakdown.

Pyrolysis is an endothermic process.

Pyrolysis produces three components from solid wastes. They are gas, liquid and char.

The gas includes methane, hydrocarbons, carbon dioxide, etc.

Liquid includes tar, acetic acid, acetone, methanol etc.

The char includes carbon.

The gas, liquid and char have high calorific value.

It is released by combustion.

6. Reduction in Use

Less use of raw materials will decrease the production of waste.

7. Reuse

Certain wastes can be reused.

Newspaper can be reused for packing.

Cycle tubes are used for making rubber bands.

Water pollution

Water is the soul of nature; its pollution will perish the World.

Water pollution refers to the undesirable change occurring in water which may harmfully affect the life activities of man and domesticated species.

Control of Water Pollution

Water pollution is controlled by the following methods:

1. The sewage water should not be allowed into the rivers, ponds, reservoirs, etc.
2. The sewage water should be collected in separate tanks and treated.
3. Rain water should not be allowed to enter sewage drainage.
4. Pesticides and chemical fertilizers should be used in a limited way.
5. Biofertilizers like blue green algae are used instead of chemical fertilizers
6. Integrated pest management should be adopted.
7. Nitrogen fixing green plants are used to improve the fertility of the soil.
8. Surface run off of manure and fertilizers is allowed into the fields.
9. Waste waters are treated at the point source. (place of origin)
10. Waste waters are subjected to sewage treatment or recycling or waste stabilization pond.
11. Water should be properly chlorinated.

Air Pollution

Air pollution refers to the undesirable change occurring in air causing harmful effects on man and domesticated species.

Control of Air Pollution

1. The emission of exhaust from automobiles can be reduced by devices such as positive crankcase ventilation valve and catalytic converter.
2. Electrostatic precipitators can reduce smoke and dust from industries.

3. Gaseous pollutants arising from industries can be removed by differential solubility of gases in water.
4. A fine spray of water in the device called scrubber can separate many gases like NH_3 , SO_2 , etc. from the emitted exhaust.
5. Certain gases can be removed by filtration or absorption through activated carbon.
6. Certain gases can be made chemically inert by chemical conversion.
7. At the Government level pollution can be controlled by framing legislations.
8. Euro-II standard is introduced to reduce sulphur content of fuels to 500 ppm for reducing the SO_2 emission from automobiles.

Noise Pollution

Noise pollution is unwanted sound dumped into the environment.

Control of Noise Pollution

Noise pollution can be controlled in the following ways:

1. Legislations should be framed.
2. The sources that generate unwanted sound should be reduced.
3. Noisy automobiles should be condemned.
4. Wheels of automobiles should be oiled properly.
5. Industrialists must take up necessary steps to control noise.
6. Loudspeakers should be set at a low sound.
7. Trees absorb noise and thus reduce noise pollution. So thick vegetation must be grown around industries, cities and on the sides of roads.
8. Noise producing machines should be placed in closed rooms.
9. Residential houses should be constructed far away from industries, factories and airports.
10. Lubricate the machines properly.
11. Tighten the loose nuts.
12. Prevent vibrations of machines.

Soil Pollution

The undesirable change in the land that harmfully affect the life activities is called soil pollution. Soil is the upper layer of the earth. It is the land.

We live on the land. Plants take root in the soil.

Control of Soil Pollution

Soil pollution is controlled by the following methods:

1. The 3R principles of pollution control are followed to prevent soil pollution.
R- Reduction- Less use
R-Reuse
R-Recycle
2. Kitchen wastes are dumped into municipal waste container kept on the sides of streets.
3. Solid wastes of kitchen, municipality, hospitals, broiler houses, slaughter houses, agriculture, etc. are treated by the following methods

- a) Landfill - Burying underground
 - b) Composting- Making manure
 - c) Incineration - Burning
 - 4. Pesticides are used in limited amount and only when necessary.
 - 5. Biological pesticides are used.
 - 6. Pest resistant varieties are cultivated as crops.
 - 7. Organic manures are used instead of chemical fertilizers.
 - 8. Biofertilizers are used.
 - 9. Soil erosion is prevented by preventing land degradation
- Soil erosion is avoided by
- ❖ Planting trees
 - ❖ Strip cropping
 - ❖ Contour cultivation
 - ❖ Constructing diversion channels
- 10. Land sliding is prevented.
 - 11. Water logging is prevented
 - 12. Sewage water is treated with the following steps
- ❖ Primary treatment
 - ❖ Secondary treatment
 - ❖ Tertiary treatment
- 13. Industrial effluents must be treated at the point source.

Conservation of Energy

- 1. Regulated and restricted use of non-renewable energy.
- 2. Wastage of energy should be minimized.
- 3. Eco-friendly energy must be used more.
- 4. Wind power and hydropower must be exploited extensively.
- 5. Plant and animal wastes must be used to produce biogas.
- 6. Petrocrops (Crops producing petrol) must be cultivated on a large scale.
- 7. Use of bicycle reduces energy.
- 8. In agriculture, for lifting water, wind power must be used.
- 9. For street lights solar cells may be used.
- 10. The fluorescent lamp may be replaced by incandescent lamp.
- 11. Lighter materials must be used for making cars. Aluminium, fibre glass, plastics, may be used instead of steel. This will reduce fuel consumption.
- 12. Awareness for limited use of energy must be created in the minds of people.

Wild life Conservation

Wild life refers to the uncultivated species of plants and animals living in their natural habitat. Wild life management refers to the protection, preservation, perpetuation and judicious control of populations of rare species of plants and animals in their natural habitat.

Aims of Wild Life Conservation

Wild life conservation has the following aims:

1. To protect and preserve the rare species of plants and animals from extinction
2. To preserve the breeding stock.
3. To prevent deforestation
4. To maintain the balance of nature.
5. To study the ecological relations of the plants and animals in natural habitat

Necessity for Conservation

The conservation of wild life provides the following advantages and benefits:

1. Balance of Nature

Conservation of life maintains a balance of nature. Examples: a. When all the herbivorous animals in a forest are killed, the tiger and lions enter human settlements and attack human beings and domesticated species. b. The killing of snakes for their skin allows the rat population to increase enormously.

2. Genetic Resources

The wild flora and fauna are a rich resource of genes which can be used in breeding new forms of plants and animals with desirable characters like disease resistance, high productivity, higher ecological amplitude, etc. This calls for the preservation of wild life as an important genetic resource.

3. Economic Value

Wild life is a wealth of the country and it is a good source of income. Wild life yields timber, firewood, hides, ivory, horns, fur, etc. Live and dead animals can be stored in Zoos and Museums for exhibition.

4. Recreation

Wild life forms a source of enjoyment and recreation to human beings.

5. Education

Visits to sanctuaries give education to the students of school and colleges.

Unit IV First - Aid

First-aid is the immediate care given to the victim of an accident or sudden illness before the arrival of a qualified expert. The purpose of First-aid is to preserve life, assist recovery, prevent

aggravation and minimize complications at a later date with the help of such material as may be available.

ARTIFICIAL RESPIRATION

- Mouth to Mouth: This is appropriate and effective technique for emergency artificial respiration.
- Keep the head slightly backward and open the jaw.
- Seal the casualty's nose to prevent escape of air by pinching with thumb and index finger.
- Take a deep breath, open your mouth widely, place it over the victim's mouth and make a tight seal.
- Quickly blow the full breath into the mouth of victim.
- Remove your mouth from the victim and allow him to exhale passively.
- Repeat the procedure 12 to 15 times per minute, till medical aid is arranged.
- Arrange immediate medical aid.

CAUTIONARY NOTE

- Do not give mouth to mouth resuscitation during CPR in the presence of toxins such as cyanide, hydrogen sulphide, corrosives and organo-phosphates. Ventilate the casualty by using a face mask or bag/valve/mask assembly.
- Avoid mouth to mouth resuscitation if there is possibility of transmission of infection between the victim and the rescuer, such as HIV, Hepatitis-B, Tuberculosis, Shigellosis, Meningococcal meningitis, Herpes simplex virus and Salmonella. Use an interpositional airway device which must function effectively in both its resuscitation and protective roles, and be immediately available at all times.

CONTROL OF BLEEDING

- Apply direct pressure by thumb or finger.
- Apply dressing – gauze pad and bandage.
- Apply indirect pressure on pressure points.
- Apply tourniquet.
- Remove the injured to the hospital.

FRACTURES

Signs of Fracture : Pain, Tenderness, Swelling,
Loss of Power, Deformity

- Do not move the injured unless the life is endangered from other causes.
- Deal with the haemorrhage and breathing difficulties. Immobilise the fracture by using suitable splints.
- Immobilisation should include one joint above and one joint below the fracture.
- Remove the injured to the hospital.

BURNS

- Pour running cold water on the affected part.
- Do not apply ointments or oils or any other substance.
- Cover the wound with sterilized cloth.
- Give artificial respiration, if needed.
- Prevent shock.
- Arrange immediate medical aid.

SHOCK

- Lay the patient on his back.
- Stop bleeding, if any.
- Relieve pain by supporting the injured part.
- Keep the patient comfortable.
- Do not cause sweating.
- Fluids may be given by mouth in small amounts, if the patient is conscious.
- Reassure the patient.
- Arrange immediate medical aid.

WOUNDS

- Stop the bleeding, if any.
- Avoid touching the wounds.
- Cover the wound with sterilized cloth.
- Arrange immediate medical aid.

EYE INJURIES

- Removal of foreign body should not be attempted.
- Do not apply oil or ointment.
- Apply sterile pad and loose bandage.
- Send the patient to the hospital.

ABDOMINAL WOUNDS

- No time should be lost in sending the patient to the hospital.
- Keep the patient flat on his back.
- Give nothing by mouth.
- Maintain warmth.
- If intestines protrude from the wound, do not attempt to touch or replace them.
- Apply sterile dressing and binder on the wound.
- Provide immediate transportation to the hospital.

BACKBONE FRACTURE

- Fracture of backbone may lead to paralysis of limbs. Hence, victim should be handled with great care.
- Transport on a rigid frame, which may be improvised by using available board.
- The rigid frame is to be placed on a stretcher for transportation.
- Immediate hospitalization is needed.

HEAT STROKE

- Make the patient lie down.
- Remove all clothings except the underwear.
- Keep the patient under the fan.
- Pour cold water on the body repeatedly.
- Wash the head thoroughly with cold water and dry it with towel.
- Record body temperature falls up to 38°C stop pouring water.
- Give plenty of cold water with a pinch of common salt in each glass of water to drink.
- Send the patient to the hospital.

BLEEDING NOSE

- Make the patient sit on a Chair with head downward.

- Pinch the nose with fingers and thumb.
- Apply ice or cold compression.
- Do not plug the nostrils.
- Do not put water or any medicine through the nostrils.
- Send for medical aid immediately.

FOREIGN BODY IN THE NOSE

- Do not try to remove the solid object.
- Ask the patient to breathe through mouth.
- Send the patient to the hospital.

BLEADING EAR

- Lay the patient with the head slightly raised.
- Incline the head to the affected side and apply a dry dressing over the ear with loose bandage.
- Do not plug the ear.
- Apply pressure in front of the ear.
- Send for medical aid immediately.

FOREIGN BODY IN THE EAR

- Solid – Do not try to remove, scratch or probe it.
- Insects – Put a few drops of water in the ear and turn the head so that affected ear points upwards.
- Keep the head in that position for 5 minutes, then turn the head downwards so that the water flows out.
- Arrange immediate medical aid.

SNAKE BITE

- Reassure the patient
- Do not allow the person to run or walk
- Apply a ligature above the wound (in between the heart and the wound) if the bite is in the leg or hand.
- Wash the wound with potassium permanganate solution or with soap and water.
- Allow free bleeding.
- Never suck the blood from the wound.
- Treat for shock.
- Arrange immediate hospitalization, by transporting the patient in a lying down position.

DOG BITE

- Clean the wound immediately with water.
- Then wash with antiseptic soap and water.
- Do not try to stop bleeding.
- Do not cover the wound.
- Send the patient to hospital for treatment.

INSECT BITE

- The sting bite should be pulled out.
- Apply cold compression.
- Apply vinegar diluted with water.

- Soda-bicarbonate paste should be applied at the site.
- Prevent shock.
- Send for medial aid immediately.

CHEMICAL BURNS OF THE EYES

- Immediate washing of the eye with clean water at least for fifteen minute or longer.
- Apply sterile dressing over the eye.
- Neutralising agents or ointments should not be used.
- Send the patient to the hospital.

SUFFOCATION

- Remove the patient from the source
- Clean the airways.
- Restore breathing by artificial respiration.
- Send the patient to the hospital.

ELECTRIC SHOCK / INJURIES

- Do not touch the casualty while he is still in contact with electricity.
- Switch off the current at once.
- Do not attempt first aid until the contact has been broken.
- Make the air passage clear and clean.
- Restore breathing Artificial respiration and external cardiac massage, if needed.
- Call for immediate medical aid.
- Send the patient to the hospital.

UNCONSCIOUSNESS

- Make the patient lie down on his belly with head turned to one side.
- Check breathing and pulse.
- Loosen tight clothings.
- Clean the air-way.
- Give artificial respiration and external Cardiac Massage, if needed.
- Transport the patient to the hospital.

POISONING

- Find the nature of the poison
- Give universal antidote mixture as given below to drink:
 - Charcoal powder - 2 table spoons
 - Coffee powder - 2 table spoons
 - Chalk powder - 1 table spoon
 Add it to a glass of warm water and mix well.
- Send the patient immediately to the hospital.

Unit V Disaster Management

What is a Disaster?

A disaster is defined as a disruption on a massive scale, either natural or man-made, occurring in short or long periods. Disasters can lead to human, material, economic or environmental hardships, which can be beyond the bearable capacity of the affected society. As per statistics, India as a whole is vulnerable to 30 different types of disasters that will affect the economic, social, and human development potential to such an extent that it will have long-term effects on productivity and macro-economic performance.

Types of Disaster:

Disasters can be classified into the following categories:

- **Water and Climate Disaster:** Flood, hail storms, cloudburst, cyclones, heat waves, cold waves, droughts, hurricanes. (Read about [Cyclone Disaster Management](#) separately at the linked article.)
- **Geological Disaster:** Landslides, earthquakes, volcanic eruptions, tornadoes
- **Biological Disaster:** Viral epidemics, pest attacks, cattle epidemic, and locust plagues
- **Industrial Disaster:** Chemical and industrial accidents, mine shaft fires, oil spills,
- **Nuclear Disasters:** Nuclear core meltdowns, radiation poisoning
- **Man-made disasters:** Urban and forest fires, oil spill, the collapse of huge building structures

Natural Disasters

Earthquake

A sudden movement (or) trembling of the earth crust is called as earthquake. The movement of the tectonic plates, mass wasting, landslides, surface fault, etc., causes earthquake.

An earthquake is a sudden vibration of the part of the earth caused by plate movements. It occurs along the plate boundaries. The place inside the earth where an earthquake originates is focus. The point on the earth's surface above the called a focus is called an epicentre. The damage caused by the earthquake is the highest near the epicentre. The earthquake is measured by an instrument called a Seismograph. It is recorded in Richter scale. Let us now see how the communities can better respond to earthquakes.

What to do during an earthquake?

Be aware that some earthquakes are actually foreshocks and a larger earthquake might occur later. Minimize your movements to a few steps that reach a safe place nearby and stay indoors until the shaking has stopped and you are sure exiting is safe.

If indoors

1. DROP to the ground; take COVER by getting under a sturdy table or other piece of furniture and HOLD ON until the shaking stops. If there is no table or desk near you, cover your face and head with your arms and crouch in an inside corner of the building.
2. Protect yourself by staying under the lintel of an inner door, in the corner of a room, under a table or even under a bed.
3. Stay away from glass windows, outside doors and walls and anything that could fall (such as lighting fixtures or furniture).
4. Stay inside until the shaking stops and go outside.

If outdoors

1. Move away from buildings, trees, streetlights and utility wires.
2. If you are in open space, stay there until the shaking stops. The greatest danger exists directly outside buildings at exits and alongside exterior walls. Most earthquake-related casualties result due to collapsing walls, flying glass and falling objects.

If in a moving vehicle

1. Stop as quickly as safety permits. Avoid stopping near or under buildings, trees, overpasses and utility wires.
2. Proceed cautiously once the earthquake has stopped. Avoid roads, bridges or ramps that might have been damaged by the earthquake.

Effects

Due to a strong earthquake, loss of lives, buildings, roads, bridges and dams are damaged. Earthquake cause floods, tsunamis, landslides, fires, break down of water supply and electrical lines. It may change the course of a river too.

Tsunami

When earthquake jolts the ocean floor, the sudden dislocation of the sea bed occurs and the resulting displacement of water can produce one or more huge, destructive waves, known collectively as a Tsunami. The sea waves rise to several meters and may reach the coast within a few minutes.

A tsunami can kill or injure people and damage or destroy buildings and infrastructure as waves come forth and recede. A tsunami is a series of enormous ocean waves caused by earthquakes, underwater landslides, volcanic eruptions or asteroids. Tsunamis can travel 700-800 km per hour, with waves 10-30 meter high.

Effects

It causes flooding and disrupts transportation, power communication and water supply.

How to respond to Tsunami?

1. You should find out if your home, school, workplace or other frequently visited locations are in tsunami hazard areas along the sea-shore.
2. Plan evacuation routes from your home, school, workplace, or any other place you could be, where tsunamis poses a risk.
3. Use a weather radio or stay tuned to a local radio or television station to keep informed of local watches and warnings.
4. Discuss tsunamis with your family. Everyone should be aware of what to do when tsunami strikes. Discussing tsunamis ahead of time will help reduce fear and save precious time in an emergency. Review flood safety and precautionary measures with your family.

What to do after a Tsunami?

1. You should continue using a weather radio or staying tuned to a Coast Guard emergency frequency station or a local radio or television station for updated emergency information.

2. Check yourself for injuries and get first aid if necessary, before helping injured or trapped persons.
3. If someone needs to be rescued, call professionals with the right equipment to help.
4. Help people who require special assistance, like Infants, elderly people, those without transportation, large families who may need additional help in an emergency situation, people with disabilities, and the people who care for them.
5. Stay out of a building if water remains around it. Tsunami water, like floodwater, can undermine foundations, causing buildings to sink, floors to crack, or walls to collapse.
6. Check for gas leaks. If you smell gas or hear a blowing or hissing noise, open a window and get everyone outside quickly.

Flood

Sudden overflow of water in a large amount caused due to heavy rainfall, cyclone, melting of snow, Tsunami or a dam burst.

Effects

1. Loss of life and property
2. Displacement of people
3. Spread of contagious diseases such as Cholera and Malaria etc.,

Cyclone

A low-pressure area which is encircled by high pressure wind is called a cyclone.

Effects of cyclone

The main effects of tropical cyclone include heavy rain, strong wind, large storm surges near landfall and tornadoes.

Case study

"Severe cyclonic storm Gaja crossed the coasts of Tamilnadu and Puducherry around Vedaranyam and agapattinam in the early hours of November 10, 2018 Friday with wind speed gusting of around 120 Kmph)" reported the Indian Meteorological Department.

Man-made Disasters

Stampede

The term stampede is a sudden rush of a crowd of people, usually resulting in injuries and death from suffocation and trampling. It is believed that most major crowd disasters can be prevented by simple crowd management strategies. Human stampedes can be prevented by organization and traffic control, such as barriers, following queues and by avoiding mass gathering.

Fire

Fire is a disaster caused due to electrical short circuit, accidents in chemical factory, match and crackers factory.

Fire involves 3 basic aspects

1. Prevention
2. Detection
3. Extinguishing

Public awareness of what to do before fire, during fire and after fire is of critical importance.

Industrial Disaster

Industry faces multiple risks involved with its production, transportation, storage, usage and disposal of the effluents containing residuals and hazardous materials from nuclear and chemical industries. Example: Bhopal gas leakage

What is Disaster Management?

The systematic process of applying administrative directives, organizations, and operational skills and capacities to implement strategies, policies and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster is called Disaster Management.

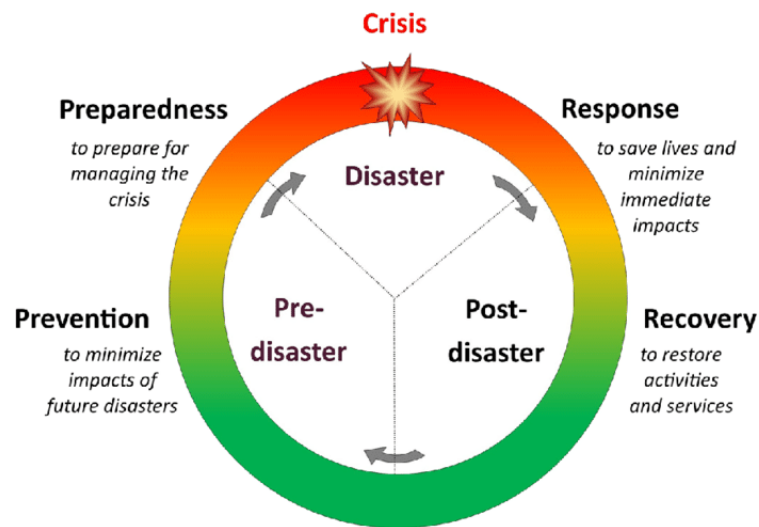
Disaster Management is necessary or expedient for:

- Prevention
- Mitigation
- Preparedness
- Response

- Recovery
- Rehabilitation

Disaster Management Cycle or Disaster cycle

The six disaster management phases that have been used in the concept of disaster cycle are as follows



Pre – Disaster Phase

Prevention and Mitigation

Reducing the risk of disasters involves activities, which either reduce or modify the scale and intensity of the threat faced or by improving the conditions of elements at risk. The use of the term reduction to describe protective or preventive actions that lessen the scale of impact is therefore preferred. Mitigation embraces all measures taken to reduce both the effects of the hazard itself and the vulnerable conditions to it, in order to reduce the scale of a future disaster.

In addition to these physical measures, mitigation should also be aimed at reducing the physical, economic and social vulnerability to threats and the underlying causes for this vulnerability. Therefore, mitigation may incorporate addressing issues such as land ownership, tenancy rights, wealth distribution, implementation of earthquake resistant building codes etc.

Preparedness

The process includes various measures that enable governments, communities and individuals to respond rapidly to disaster situations to cope with them effectively. Preparedness includes for example, the formulation of viable emergency plans, the development of warning systems, the

maintenance of inventories, public awareness and education and the training of personnel. It may also embrace search and rescue measures as well as evacuation plans for areas that may be “at risk” from a recurring disaster. All preparedness planning needs to be supported by appropriate rules and regulations with clear allocation of responsibilities and budgetary provision.

Early Warning

This is the process of monitoring the situation in communities or areas known to be vulnerable to slow onset hazards, and passing the knowledge of the pending hazard to people harmless way. To be effective, warnings must be related to mass education and training of the population who know, what actions they must take, when warned.

The Disaster Impact

This refers to the “real-time event of a hazard occurrence and affecting elements at risk. The duration of the event will depend on the type of threat; ground shaking may only occur in a matter of seconds during an earthquake. Where as flooding may take place over a longer sustained period.

During Disaster Phase

Response

This refers to the first stage response to any calamity, which include setting up control rooms, putting the contingency plan in action, issue warning, action for evacuation, taking people to safer areas, rendering medical aid to the needy etc., simultaneously rendering relief to the homeless, food, drinking water, clothing etc. to the needy, restoration of communication, disbursement of assistance in cash or kind. The emergency relief activities undertaken during and immediately following a disaster, which includes immediate relief, rescue, and the damage needs assessment and debris clearance.

The Post- Disaster Phase

Recovery:

Recovery is used to describe the activities that encompass the three overlapping phases of emergency relief, rehabilitation and reconstruction.

Rehabilitation:

Rehabilitation includes the provision of temporary public utilities and housing as interim measures to assist long-term recovery.

Reconstruction:

Reconstruction attempts to return communities with improved pre-disaster functioning. It includes replacement of buildings; infrastructure and lifeline facilities so that long-term development prospects are enhanced rather than reproducing the same conditions, which made an area or population vulnerable.

Development: In an evolving economy, the development process is an ongoing activity. Long-term prevention/disaster reduction measures like construction of embankments against flooding, irrigation facilities as drought proofing measures, increasing plant cover to reduce the occurrences of landslides, land use planning, construction of houses, capable of withstanding the onslaught of heavy rain/wind speed and shocks of earthquakes are some of the activities that can be taken up as part of the development plan.

Disaster Management in India

National Disaster Management Authority, abbreviated as NDMA, is an agency of the Ministry of Home Affairs whose primary purpose is to coordinate response to natural or man-made disasters and for capacity-building in disaster resiliency and crisis response. NDMA was established through the Disaster Management Act enacted by the Government of India on 23rd December 2005.

The National Disaster Response Force (NDRF) is a specialized force constituted for the purpose of specialist response to a threatening disaster situation or disaster under the Disaster Management Act, 2005. National Institute of Disaster Management (NIDM) is a premier institute for training and capacity development programs for managing natural disasters in India, on a national as well as regional basis.

Disaster Management in Tamilnadu

Tamilnadu State Disaster Management Authority (TNSDMA) is responsible for all measures for mitigation, preparedness, response, and recovery are undertaken under the guidance and supervision of the Authority.

Tamilnadu State Disaster Response Force (SDRF) has been constituted with a strength of 80 Police Personnel. They have been trained in disaster management and rescue operations in consultation with **National Disaster Response Force (NDRF)**.

District Disaster Management Authority (DDMA) is responsible for Disaster Management at district level State Disaster Management plan – The perspective plan – 2018 - 2030 prepared by the Revenue and Disaster Management Department. Hot line between Indian Meteorological Department and the State Emergency Operation Centre is established and mitigation in the District is done through telephone, fax and IP phones also available which connect the State with District Head Quarters, Taluks and Blocks of the State. Wireless radio network with both high frequency and very high frequency are also available in the State.