**NETAJI SUBHAS OPEN UNIVERSITY**



**PAPER NAME: TECHNOLOGY AND DISABILITY**

**PAPER CODE: C – 15**

**UNIT NO – 5**

**TOPIC NAME – RESOURCE MOBILIZATION FOR TECHNOLOGY**

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**5.1 INTRODUCTION**

Resource mobilization is the process of getting resource from resource provider, using different mechanisms, to implement the organization‘s work for achieving the pre-determined organizational goals. It deals in acquiring the needed resources in a timely-cost effective manner. Resource mobilization advocates upon having the right type of resource, at the right time, at right price with making right use of acquired resources thus ensuring optimum utilization of the same.

**5.2 OBJECTIVES**

After completion of this course, the student will be able to:

* Know about the various agencies for aids and appliances both government and non-government
* Know about the criteria for availing funding under government scheme
* Know about process for availing funding from various agent
* Know about the challenges encountered with cost involved in maintenance of devices after availing funding and ways to overcome
* Know about the various agencies to locate required human resources for various services and referrals

**5.3 AGENCIES FOR AIDS AND APPLIANCES: GOVERNMENT AND NON- GOVERNMENT**

It has been the constant endeavor of the Government to provide the disabled persons with aids/appliance, at minimum costs, which are essential for their social, economic and vocational rehabilitation. With the application of modern technology, a number of aids have emerged which can reduce the effects of disabilities and enhance the economic potential of the disabled. However, a large number of disabled persons are from the low income groups and are deprived of the benefits of these appliances because of their inability to find funds to acquire them and consequently of dignified independent living.

**SCHEME OF ASSISTANCE TO DISABLED PERSONS (ADIP SCHEME)**

In the light of the Government’s commitment for enabling and empowering disabled persons, it has been decided to continue and modify ADIP Scheme in such a way that it becomes more user-friendly and the needy are not deprived of necessary aids /appliances for want of means to acquire them together with a transparent mechanism for checks and balances.

**OBJECTIVES OF ADIP SCHEME:**

* To assist the needy disabled persons in procuring durable, sophisticated and scientifically manufactured, modern, standard aids and appliances to promote physical, social, psychological rehabilitation of Persons with Disabilities by reducing the effects of disabilities
* To enhance their economic potential.
* To improve their independent functioning by giving Assistive devices
* To arrest the extent of disability and occurrence of secondary disability
* To improve their independent functioning
* To arrest the extent of disability and occurrence of secondary disability
* The aids and appliances supplied under the Scheme must have due certification

**IMPLEMENTING AGENCY UNDER THE SCHEME:**

* Societies and their branches, if any, registered separately under the Societies Registration Act, 1860
* Registered Charitable Trusts.
* Indian Red Cross Societies
* Other Autonomous Bodies headed by District Collector/Chief Executive Officer/District Development Officer
* National/Apex Institutes, CRCs, RCs, DDRCs, National Trust, ALIMCO functioning under administrative control of the Ministry of Social Justice and Empowerment/Ministry of Health and Family Welfare
* National/State Handicapped Development Corporation
* Section 25 Companies in the Private Sector
* Local Bodies – Zilla Parishad, Municipalities, District Autonomous Development Councils and Panchayats etc
* Hospitals registered as separate entity, as recommended by State/UT/Central Govt
* Nehru Yuva Kendras
* Any other organization as considered fit by Department of Disability Affairs, Ministry of SJ&E

**ELIGIBILITY OF THE BENEFICIARIES:**

* An Indian citizen of any age
* Holds a 40% Disablement Certificate
* Has monthly income from all sources not exceeding Rs. 20,000/- per month.
* In case of dependents, the income of parents/guardians should not exceed Rs. 20,000/- per month
* Who have not received assistance during the last 3 years for the same purpose from any source. However, for children below 12 years of age, this limit would be one year
* Income certificate of beneficiaries staying in orphanages and half-way homes etc. may be accepted on certification of District Collector or Head of the organization concerned. Such beneficiaries will be provided aids & appliances under this Scheme by ALIMCO

**QUANTUM OF ASSISTANCE:**

* For aids and appliances costing upto Rs. 10,000/-. Aids/appliances which do not cost more than Rs. 10,000/- are covered under the Scheme for single disability. However, in the case of SwDs, students beyond IX class, the limit would be raised to Rs.12,000/- In the case of multiple disabilities, the limit will apply to individual items separately in case more than one aid/appliance is required

**COCHLEAR IMPLANT:**

Ministry of Social Justice and Empowerment will recognize an Institute of national stature from each zone to recommend children eligible under the Scheme for cochlear implant, with a ceiling of Rs.6.00 lakh per unit to be borne by the Government. Ministry will also identify and recognize the Institutes in the zones wherein the surgery will be undertaken. Ministry will identify suitable agencies for providing cochlear implant (500 children per year) under the Scheme. Income ceiling for the beneficiaries will be same as for other aids/appliances. Beneficiaries will be linked with Aadhar number or Ration Card or Voter Icard from 2014-15 and with Aadhar number from 2015-16

**AMOUNT OF ASSISTANCE:**

|  |  |
| --- | --- |
| Total Income | Amount of Assistance |
| Upto Rs. 15,000/- per month | Full cost of aid/appliance |
| Rs.15,001/- to Rs. 20,000/- per month | 50% of the cost of aid/appliance |

**TYPES OF AIDS/APPLIANCES:**

The following aids and appliances may be allowed for each type of disability. However, any other item as notified from time to time by the Ministry of Social Justice and Empowerment for the purpose will also be allowed.

**LOCOMOTOR DISABLED:**

* All prosthetic and orthotic devices
* Mobility aids
* Surgical foot wears, MCR chappals
* All types of devices for activity of daily living as recommended by expert committee from time to time
* Motorized tricycles and wheelchairs for severely disabled and for Quadriplegic (SCI), Muscular Dystrophy, Stroke, Cerebral Palsy, Hemipeligia and any other person with similar conditions, where either three/four limbs or one half of the body are severely impaired. Extent of subsidy would be Rs.25,000/-. This will be provided to the persons of age of 18 years and above, once in ten years

**VISUALLY DISABLED INCLUDING DEAF BLIND AND WITH OTHER DISABILITIES:**

* Accessible Mobile Phone to visually impaired students of the age 18 years and above only, once in five years and to provide Laptop, Braille Note Taker and Brallier to school going disabled students (10th and above), once in 10 years
* Learning equipments
* Braille writing equipments
* Communication equipments, Braille attachments for telephone for deaf blind persons.
* Low vision aids
* Special mobility aids for visually disabled people with muscular dystrophy or cerebral palsy like adapted walkers as recommended by expert committee from time to time

**HEARING DISABLED:**

* Various types of hearing aids, including BTE etc
* Educational kits
* Assistive and Alarm devices

**MENTALLY DISABLED:**

* Any suitable device /kit/learning material as advised by expert committee from time to time

**MULTIPLE DISABILITIES, INCLUDING LEPROSY CURED WHEREVER REQUIRED:**

* Any suitable device as advised by expert committee from time to time

**RESEARCH & DEVELOPMENT:**

1% of Budget under the Scheme may be used for Research in aids & assistive devices and seeking accreditation with international bodies of equivalent standard of ISI. Details to be worked out by expert committee in the Department from time to time.

**PROCEDURE FOR RECEIPT OF GRANT-IN-AID BY AN IMPLEMENTING AGENCY:**

The application should be accompanied with following documents/information (duly attested)

* A copy of Registration Certificate u/s 51/52 of Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation Act (PwD Act), 1995
* A copy of Registration Certificate under Societies Registration Act, 1860 and their branches, if any, separately or Charitable Trust Act
* Names and details of the Members of Management Committee of the Organization
* A copy of Rules, Aims and Objectives of the Organization
* A copy of Certified Audited Accounts and Annual Report for the previous year (showing that the organization is financially sound)
* The Implementing Agencies already receiving grant-in-aid under the Scheme should also furnish the list of beneficiaries assisted from the grant-in-aid released to them in the previous year, as per proforma and summary of beneficiaries covered in hard copy not exceeding two pages.
* Utilization Certificate may be given.
* The Implementing Agencies shall provide one year free maintenance of the aids & assistive devices supplied by them
* The organization will provide reservation to SC/ST/OBC and disabled persons in accordance with instructions issued by Govt. of India from time to time if its employees are more than 20 persons on a regular basis
* Implementing agency should also maintain a website and upload details of grants received, utilized and list of beneficiaries along with photo and Ration Card Number/voter ID Number/Adhar Card Number, as the case may be

**SANCTION/RELEASE OF GRANT-IN-AID:**

* The Implementing Agencies will be sanctioned grant-in-aid in a particular financial year after receiving recommendations from State Government/UT Administration/National Institute/any other agency authorized by Department of Disability Affairs. The subsequent financial assistance would be sanctioned after receipt of Utilization Certificate as prescribed
* Third party evaluation shall be done for the implementing agency. Expert Committee shall also be the Monitoring Committee and shall appoint the third party evaluation agencies. The Committee shall sit at least twice a year
* The recommending authority shall conduct sample checking of beneficiaries regarding utilization of grant-in-aid by the Implementing Agency. The sample checking would cover at least 15% (in case of GIA upto Rs. 10.00 lakh) and 10% (in case of GIA exceeding Rs. 10.00 lakh)
* The grant-in-aid would normally be released in one installment if GIA is less than Rs. 10 lakh. However, this limit will not apply for special camps held with the approval of Department of Disability Affairs. Quantum of 1st and 2nd installment will be decided by the Department keeping in view the provisions under General Financial Rules and also in consultation with Integrated Finance Division
* Implementing agencies shall use 5% of the grant-in-aid as administrative/overhead expenses for conducting awareness, assessment and follow-up camps

**CONDITIONS FOR ASSISTANCE**:

* The Implementing Agency shall obtain a certificate from the concerned competent authority regarding monthly income of beneficiaries
* The Implementing Agency will maintain a register in the prescribed proforma about the beneficiaries assisted under the Scheme
* The Implementing Agency shall maintain a separate account of funds received and utilized from the Ministry of Social Justice and Empowerment under the Scheme. The fund should be kept in a separate bank account, to be operated under ADIP Scheme duly certified by C.A.
* A certificate from the Head of the Implementing Agency to the effect that the funds have been utilized. A list of beneficiaries as per proforma assisted by the organization that the funds given by the Ministry will be furnished along with the yearly application
* The final accounts for a financial year will be rendered through utilization certificate and audited accounts signed by Chartered Accountant within six months of the close of the financial year along with bill & vouchers
* The Implementing Agency will obtain an undertaking from the beneficiary that he/she has not obtained such aid from any other agency/source during the last three years and that he/she will keep it for his/her bona fide use
* The Implementing Agency will be open to inspection by an officer/third party agency authorized by Union Ministry of Social Justice and Empowerment or the State Government/UT Administration/National Institutes/DRCs etc.
* When the Government of India has reasons to believe that the sanction is not being utilized for the approved purpose the amount would be recovered from the implementing agency with interest and no further assistance would be given to the agency. Ministry will be at liberty to blacklist such organization and to take legal action as per law
* The implementing agencies would not incur any liability under the Scheme, unless the funds have been sanctioned to them, except in the case of an implementing agency who has distributed approved aids and devices as per norms/cost ceiling under the Scheme against loan as certified by Chartered Accountant and such money to be operated from a separate account limited to amount of last year’s grant-in-aid. Department of Disability Affairs will not bear interest burden on the loan amount
* Reservation for SC/ST/OBC beneficiaries under the Scheme as per the Government norms and at least 25% of the overall beneficiaries need to be girl child/women
* All camps will display the details of the Scheme & assistance received there under and the website of the Ministry (www.socialjustice.nic.in). Photos of the camps held will also be uploaded on the website of the Implementing Agency

**5.4 ELIGIBILITY CRITERIA FOR AVAILING FUNDINGS UNDER GOVERNMENTS SCHEMES**

**STATE DISABILITY PENSION:**

This scheme may be called as West Bengal Disability Pension scheme, 2010. The monthly grant for this scheme is Rs 750/- per month.

**ELIGIBILITY CRITERIA:**

* The Disabled person is a citizen of India and resident of the state namely West Bengal
* The Disabled person’s family income, if any, does not exceed Rs. 1000/-(one thousand) per month
* The Disabled person is declared unsuitable for physical work by the  respective Medical Officer
* Minimum 40% of disability
* The Disabled person has been a resident of the state namely West Bengal for not less than 10 years on the date of making application for Pension.  Provided that in case of the disabled person whose age is below 10 years, the period of residence shall be limited to the period covered by the date of birth and date of submission of the application
* No age limit
* The Disabled person who is a recipient of “Widow Pension”, “Old Age Pension” “Farmers Pension” or pension under “Family Pension Scheme” of the State Government / the Central Government / other concerns, shall not be entitled to the Pension under this scheme

**INDIRA GANDHI NATIONAL DISABILITY PENSION SCHEME:**

This scheme is implemented by the Department of Panchayat and Rural development.  The monthly amount is Rs 300/-

**ELIGIBILITY CRITERIA:**

* The age of the disabled shall be between 18-79 years
* The applicant must belong to household below the poverty line (BPL) according to the criteria prescribed by the Government of India
* The applicant should be suffering from severe or multiple disabilities as defined in ‘Persons with Disabilities Act, 1995 (PWD Act 1995)’ and the ‘National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities Act, 1999 (National Trust Act 1999)’ revised from time to time and any other guidelines issued by the Ministry of Social Justice and Empowerment in this regard
* The number of eligible beneficiaries to be assisted under IGNDPS will be determined as per the field report of all beneficiaries who satisfy the criteria

# EDUCATIONAL SCHOLARSHIP:

The state government is giving financial assistance to students with disabilities studying from 1st class onwards up to post graduate level. Scholarship grants upto 9th standard is administered by the department of woman and child development and social welfare whereas scholarship for class 9th onwards is administered by the directorate of Mass education and extension**.**

### ****SCHOLARSHIP UPTO 8TH**** ****CLASS:****

The rate of scholarship for students studying up to class I-VIII standard is Rs 300/- per month and the reader allowance is Rs 100/-

## ELIGIBILITY CRITERIA:

* Applicant shall be a citizen of India and be resident of West Bengal
* Minimum 40% of disability
* Shall ordinarily be below 18 years in age which may be relaxed by the Commissioner for Persons with Disabilities, West Bengal or any other authority which may be prescribed in special circumstances
* Must not be in receipt of any regular financial help either from the State Government or Government of India. Provided that he / she signs a declaration to forego such facilities availing if sanctioned by the Department of Women & Child Development and Social Welfare
* The total income of both parents / guardian of the candidate must not exceed Rs.36, 000 /- per annum
* Shall have scored passing marks in the last annual examination

**SCHOLARSHIP FOR 9TH CLASS TO HIGHER EDUCATION:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **SL NO** | **TYPE OF COURSE** | **Rate per month for day scholar** | **Rate per month for hostellers** | **Reader allowance for blind only per month** |
| **1.** | Class IX, X, H.S.(10+2) | Rs 85/- | Rs 140/- | Rs 50/- |
| **2.** | B.A./B.Sc./B.Com. etc. | 125/- | 180/- | 75/- |
| **3.** | B.E./B.Tech./,M.B.B.S./L.L.B./B.Ed./Diploma in Professional & Engineering Studies etc./ in Plant training | 170/- | 240/- | 100/- |
| **4.** | M.A./M.Sc./M.Com./LLM/M.Ed. etc. | 170/- | 240/- | 100/- |

**ELIGIBILITY CRITERIA:**

* Nationality: A disabled person who is citizen of India may apply for scholarship under this scheme
* Scholarship is awarded to the students with all categories of disability (having at least 40% disability) for pursuing general, Technical & Professional Education from class IX onwards as detailed in the table above
* Educational Requirements: student with disability should have secured at least 40% marks in aggregate at the previous annual examination
* Music course: a student with disability should have passed Madhyamik or its equivalent examination at least in 2nd division from a college affiliated to a University or to an institution of All India character approved by the Central Government
* Vocational Course : a student with disability should undertake a vocational training course in any vocational training centre / workshop/ ITI or any other centre run by the Central /State Government/Local Body or any voluntary organization or Institution recognized by the Central/State Govt.. This will also include apprenticeship or training in a recognized Institution or in Industries. Lack of academic qualification need not be a bar to vocational training
* Income Limit: No scholarship will be admissible if the combined monthly income of the parents/guardian of the candidate is more than Rs.2000/- (Rupees two thousand) only

**BUS CONCESSION:**

The state transport provides facility of free travelling in tram cars and buses owned by State Transport Undertaking to the person with vision impairment and their escort.  They should have identity card issued by District Social Welfare Officer or Child development project Officer.

**ELIGIBILITY CRITERIA:**

* Above 40% of disability
* Resident of state

## NATIONAL FELLOWSHIP SCHEME FOR PWDS:

National Fellowship for Person with Disabilities is a fellowship scheme for pursuing M.Phil/Ph.D. courses in any University recognized by University Grants Commission (UGC). Number of fellowships to be given is 200 per annum. The scheme is effective from 2012-13. However, selection of candidates of the year 2012-13 could be done only in 2013-14. The fellowship amount ranges from Rs. 25,000/- to Rs. 28,000/- per month.  In addition, there are provisions of Escort/Reader Allowance and House Rent Allowance (wherever applicable). Duration of Fellowship:  2 years for M.Phil and 5 years for Ph.D. Selection of candidates is done by UGC. Disbursement of fellowship amount is done by the Department of Empowerment of Persons with Disabilities through Canara Bank who has been designated for this purpose. The Fellowship amount is remitted by the Canara bank direct to the bank accounts of the selected candidates.

**ELIGIBILITY CRITERIA:**

* Any student with disabilities who has been admitted to M.PhiI./Ph.D. degree in a University or academic institution by completing the required formalities for admission at that University or academic institution is eligible for the award of Fellowship subject to provision of the scheme
* After two years, if the progress in the research work of the awardee is found satisfactory, his/her tenure will be extended for a further period of three years as Senior Research Fellowship (SRF). The research work will be assessed by a three member committee set up by the University. The committee will consist of the Supervisor, Head of the Department and one outside expert in the subject. JRF may be terminated in case the progress of the candidate is not found satisfactory by the committee. The SRF shall be sanctioned on year to year basis on the recommendation of the Supervisor of the candidate duly accepted/rejected by the Head of the Department and finally approved by the Vice Chancellor. The total period of award of JRF and SRF shall not exceed a period of five years. The fellowship is paid from date of registration of the students in M.Phil.lPh.D. course but not earlier than 1st April, 2012 i.e. date of effect of the scheme
* The students with disabilities once considered eligible for the fellowship shall not be entitled to any other benefits from Central or State Government or any other body like UGC offering similar benefit to avoid duplication and increased coverage. Only those doing regular and full time M.Phil./Ph.D. course of a University/Research Institution shall be eligible for the fellowship. Employees of any University/College/Educational Institution/Central/State/U'T Government shall be excluded from availing Fellowship, even if they are on Study Leave or EOL to pursue the M.Phil./Ph.D. course

**NATIONAL OVERSEAS SCHOLARSHIP FOR STUDENTS WITH DISABILITIES:**

The scheme of National Overseas Scholarship for Students with Disabilities has been launched with the objectives of  providing  financial assistance to the students with disabilities for pursuing studies abroad at the level of Masters’ Degree and Ph.D. Twenty (20) scholarships are to be awarded every year out of which six are reserved for women candidates. The scholarship amount includes Maintenance Allowance, Contingency Allowance, Tuition Fees, and Cost of Air Passage etc. The said scheme has been launched in the year 2014-15. In addition to the above, there is a “Passage Grants” to two Students with Disabilities every year.  Only those Students with Disabilities  who are in receipt of a merit scholarship for Post Graduate Studies, Research or Training abroad (excluding attending seminars, workshops, conferences), from a foreign government/ organization or under any other scheme, where the cost of passage is not provided, shall be eligible. The Passage Grant includes to-and-fro air-fare from home-station to the Institute abroad by economy class through Air India.

## SCHOLARSHIP SCHEME FROM NATIONAL FUND:

Under this scheme financial assistance is given to students with disabilities to pursue technical and professional courses from a recognized institution. There is provision of 500 scholarships every year.  The rate of scholarship is Rs.1000/-p.m. for hostellers and Rs.700/- p.m. for day scholars studying in professional courses at graduation and above level, and Rs.700/- p.m. for hostellers and Rs.400/- p.m. for day scholars pursuing Diploma /certificate level professional. Course fee is reimbursed up to ceiling of Rs.10,000/- per year. In addition, financial assistance can be given for computer with editing software for blind/deaf graduate and post graduate students pursuing professional courses and for support access software for cerebral palsy students.

**5.5 Challenges encountered with cost involved in maintenance of devices after availing funding and ways to overcome**

It is a waste of time and resources to provide a person with an assistive device if that device breaks down after a short period of time and cannot be repaired or replaced. Repair and maintenance of assistive devices is a crucial part of any strategy to achieve equality of opportunity for people with disabilities. The term "repair" refers to modifications made to a device when it is in poor or no working condition, in order to make it work properly again. "Maintenance" refers to the modification or replacement of parts made to prevent possible failures while the device is still working properly, in order to prevent repair from being necessary. Both functions can be performed by users themselves with or without the help of others with mechanical skills. Repair work is more likely to require the help of mechanics or technicians.

The ease of repair and maintenance depends partly on the design of devices, and partly on the availability of infrastructural and technical support near the users. Without some state aid, this support will grow only with time, economic progress and market demand which may not be primarily defined by the needs of disabled people. Imported devices are typically the most difficult to maintain and repair, partly for lack of components, but also because manufacturers often do not supply instruction manuals for this purpose. Users may not even know that such documents exist, especially when they purchase the devices. India has faced this problem with respect to braille presses and computerized braille printers. If people with disabilities and their helpers receive adequate instruction on the maintenance of their devices when they receive them, much less time and effort will have to be spent on repairs. Prolonged exposure to humidity, dust, sand, mud, heat, water and sunlight can cause problems such as corrosion, increased friction in moving parts and hardening of thermoplastics through ultraviolet radiation.

People with disabilities need a transition period to get used to their assistive devices before they can accept the devices as a part of their lives. This period may vary from a few weeks to a few months, while an individual user decides whether a device is suitable for the way of life she or he wants to lead.

Many users of hearing aids, for example, stop using them when they have to replace batteries and cords, which are not easily available in rural areas. Similarly, breakage of orthoses among children is usually high. In itself, this may be a good sign, as it indicates that the children have really been using the devices. But if the breakages are not dealt with quickly, children may stop using the orthoses and revert to moving as they did before the orthoses enabled them to become more active. The use of orthoses requires even more follow-up, with closer attention to detail, than the use of prostheses. An old prosthesis will not work as well as it used to if a child wearing it outgrows it but an old orthosis, in the same situation, will not work at all.

In one case, a user brought prosthesis back to the rehabilitation centre after seven years, during which time he had been trying many different methods of repair, as he had had access neither to a repair facility nor to replacement prosthesis. Living with limb disability is challenging. Many studies reveal that the quality of life of people with disabilities is lower than people without disabilities. Lower limb disabilities challenge the affected individual in many ways due to problems in mobility and stature. Fortunately, assistive device technology helps to overcome many challenges faced by people with lower limb disabilities. Assistive technology is an umbrella term used for a wide assortment of devices and services that support people with disabilities. Furthermore, it is an international priority to produce barrier-free societies for people living with disability.

Cost often deters many people with disabilities from getting their devices repaired or maintained. Many developing countries of the ESCAP region have schemes for providing assistive devices to people with disabilities, or at least those able to obtain the necessary official papers, at concessional rates. They do not, however, usually offer a similar subsidy for repairs. As a result, poor people with disabilities find it extremely difficult to afford new parts or new devices. If workshops are far away, the costs of transportation, board and lodging become a further barrier.

Malaysia and Thailand have adopted a policy of subsidizing the cost of repair, replacement and maintenance as well as that of the initial devices. This is helpful, and would be still more so if two more steps were taken to ensure the success of the policy. First, this support must be provided in a manner that is decentralized enough to reach users. Second, people with disabilities need adequate information about where to receive the support. The cost of repairs is not only monetary. It also involves the time spent repairing devices. In Thailand, repairing hospital wheelchairs has typically taken days or even weeks while technicians wait for spare parts to be delivered. In the meantime, no temporary replacement is available, leaving users immobile for a long period. This results in severe disruption of users' lives. It could be prevented if wheelchairs were loaned to users while they awaited repairs. Loaning of prostheses and orthoses would be inappropriate, but loaning of less user-specific devices would be acceptable, as those devices would only be used for a short period.

Repair and maintenance are not, of course, entirely rural problems. Devices like computerized braille embossers, text reading machines, and stair lifts are often difficult to repair even in cities and towns. The reasons can be non-availability of spare parts, lack of local technical skills, or both. most people with disabilities in the region live in rural areas; rural areas are deprived of repair and maintenance services because it is more difficult for such services to reach them; and assistive devices are subjected to far more strain in rural than in urban areas. Local mechanics and artisans can repair some devices, although they may require additional equipment and training.

Another problem is that mechanic workshops are not always available near users in rural areas. The only alternative this leaves is for users to go to the rehabilitation centre where they obtained the devices, which is a deterrent. Ideally, it would be best to have such a workshop provide the requisite services within a radius of one to two kilometres from each user. While it is often not practical to set up that many new workshops specifically for this purpose, it may be feasible to identify enough existing workshops that, with proper technical inputs, could provide the services required by most assistive-device users. When local mechanics and artisans are not nearby or are not capable of repairing a particular device, mobile workshops may be of great help. Countries which use the mobile-workshop approach for repair and maintenance include Cambodia, India and Thailand. In Cambodia and India, NGOs provide their services through mobile workshops.

However, there are numerous barriers in using assistive technology by individuals with lower limb disabilities worldwide, and they appear to be of high intensity in low income countries. One of the main barriers in accessing assistive technology in less resourced settings is the lack of funds. Limited financial resources in many countries has a major impact on availability and accessibility of assistive technology. In some countries, lack of leadership and governance are also barriers to the provision of assistive technology.

In addition, service delivery including referral, assessment, funding, ordering, product preparation, fitting, adjusting, user training, follow-up, maintenance and repairs, hinder the use of assistive technology. Lack of personnel with proper training in appropriate mobility device services is also a major barrier. In many developing countries, production of mobility devices is done only on a small scale, or perhaps not at all, due to limited access to materials, machinery and expertise. At the same time, there are physical and environmental barriers like accessibility problems, as well as cultural and social stigma in using assistive technology in low-income countries. Introduction of assistive devices such as wheelchairs into people’s lives may bring about intense emotional responses. It calls for pragmatic, emotional adaptation as the person involved looks and feels different. An assistive device will only be adopted if he/she really thinks that it is useful.

Assistive technology can have a major positive impact on the lives of persons with lower limb disabilities, improving their independence via improved mobility and balance. Assistive devices reduce stress and improve quality of life, reducing the workload of caregivers. Therefore, in order to increase the use of assistive technology, there is a great need for those who prescribe it, including surgeons and occupational therapists, to understand the feelings and experiences of persons with disabilities. Although in recent times assistive devices have been extensively prescribed, there are few evaluations of the barriers to their utilisation.

Persons with lower limb disabilities have to adjust psychologically at the point of their first instance of using assistive devices, but the significance of their emotional adjustment and their attitudes to technology have not been discussed. According to Magnusson et al (2013), pain associated with the use of assistive devices and difficulties in ambulating on challenging surfaces were the main barriers faced by a population with disabilities in Malawi, who were using lower limb prosthetic or orthotic devices. have pointed to the mismatch between the person and the assistive device as a major barrier in using assistive technology.

A study “Barriers in Using Assistive Devices among a Group of Community-dwelling Persons with Lower Limb Disabilities in Sri Lanka” conducted in Sri Lanka, the main purpose of the study was Rehabilitation with assistive devices is of great benefit to people with limb disabilities, enabling them to lead independent and productive lives. While assistive devices improve the quality of life of persons with lower limb disabilities by facilitating activities of daily living, there are also many barriers to their use. This study aims to describe these barriers among community-dwelling persons with lower limb disabilities in central Sri Lanka. Results showed that Participants described several barriers in using assistive devices, such as unaffordable assistive technology like wheelchairs and artificial limbs, unavailability of appropriate assistive technology, difficulties associated with repair and maintenance, and problems in accessibility. Limited knowledge of modern technology also restricted their choice of better devices. Psychological barriers and stigma in using assistive devices directly affected their social lives and day-to-day activities as well. People with lower limb disabilities face multiple barriers in using assistive devices. These barriers need to be addressed by improving local infrastructure and accessibility facilities, public awareness and funding, and ensuring continuous supply and maintenance services.

**Challenges in maintenance of devices after availing:**

* Lack of funds
* Low incomes
* Lack of donors
* Attitudes of donors
* Lack of quality of devices
* Accessibility problems
* Inadequacy of knowledge on newer assistive devices
* Social stigma in transport
* Attitudes of user

Persons with disabilities were afraid of getting injured if they used assistive devices, especially if they had already had that experience. In addition, most of them were worried about repair and maintenance costs of their assistive devices in the future. Magnusson et al (2013) reported pain associated with the use of assistive devices among persons fitted with lower limb prosthetic and orthotic devices in Malawi, and also described their difficulties in mobilisation on challenging surfaces. Importantly not only individual problems but also socio-economic and environmental problems associated with the use of assistive devices. People living with a disability have to cope with major changes in their lives and therefore need a lot of support. To make it easier, they should be given counselling, effective information when being prescribed assistive devices, and should have a good relationship with the prescriber throughout the entire process. In this context, their major expectation from the use of assistive devices is the ability to do things independently.

The barriers faced by among those waiting for assistive technology, there were participants who had used it previously and been forced to discontinue because their device had broken. They did not have enough money to buy a new device on their own. The first-time users faced economic barriers, availability barriers, awareness barriers and psychological barriers, whereas persons already using assistive technology faced repair and maintenance barriers, accessibility barriers and psychological barriers in addition to the barriers encountered by the first-time users. Those who were waiting for a new assistive device to replace the one used previously faced the barriers encountered by both the aforementioned groups.

Multiple barriers in using assistive technology by persons with Disabilities. These need to be addressed by improving local infrastructure and accessibility facilities, heightening public awareness, ensuring funding and a continuous supply of assistive devices supported by maintenance services. Those who prescribe these devices should communicate and convey information properly to the recipients. Persons with physical disabilities should be helped to gain more knowledge about assistive devices, especially about the availability of more modern ones. They should be given support to modify their physical and social environments. Their physical symptoms should be treated to improve physical functioning, and their psychological health should be monitored to improve mental well-being when using assistive devices.

**5.6 Agencies/ Strategies to locate human resources for various services and referrals**

Human resources are the people who make up the [workforce](https://en.wikipedia.org/wiki/Workforce) of an [organization](https://en.wikipedia.org/wiki/Organization), [business sector](https://en.wikipedia.org/wiki/Business_sector), or [economy](https://en.wikipedia.org/wiki/Economy). "[Human capital](https://en.wikipedia.org/wiki/Human_capital)" is sometimes used synonymously with "human resources", although human capital typically refers to a more narrow view (i.e., the knowledge the individuals embody and [economic growth](https://en.wikipedia.org/wiki/Economic_growth)). Likewise, other terms sometimes used include "manpower", "talent", "labour", "personnel", or simply "people". A human-resources department of an organization performs [human resource management](https://en.wikipedia.org/wiki/Human_resource_management), overseeing various aspects of [employment](https://en.wikipedia.org/wiki/Employment), such as compliance with [labour law](https://en.wikipedia.org/wiki/Labour_law" \o "Labour law) and employment standards, administration of [employee benefits](https://en.wikipedia.org/wiki/Employee_benefit), and some aspects of [recruitment](https://en.wikipedia.org/wiki/Recruitment) and [dismissal](https://en.wikipedia.org/wiki/Dismissal_(employment)).

**Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan):**

Ali Yavar Jung National Institute of Speech and Hearing Disabilities (Divyangjan) (AYJNISHD) was established on 9th August 1983. The Institute has been established for manpower development, research, clinical and therapeutic services, outreach and extension services for the persons with hearing disabilities.

The Institute is responsible for development of manpower by undertaking or sponsoring the training of trainees and teachers, employment officers, psychologists, vocational counselors and such other personnel as may be deemed necessary by the Institute for promoting the education, training or rehabilitation of the hearing handicapped. The Institute sponsors, coordinates and subsidizes research into all aspects of the education and rehabilitation of the hearing handicapped. It is also developing model services for rehabilitation of the hearing handicapped.

**Objectives of the Institutes:**

* **Manpower Development:** To deal with the various aspects of rehabilitation of the Hearing Handicapped, various undergraduate and post graduate courses are being offered. The Institute is rated excellent by the RCI
* **Research:** Research in the areas of identification, intervention, educational approaches, remedial teaching methods, jobs for the hearing handicapped and technology development have been carried out
* **Educational Programmes:** By studying the existing school for the deaf, curriculum followed, methods of teaching etc. and supplementing or strengthening them by way of improving existing educational facilities and developing new strategies wherever required, newer measures such as open school for the illiterate/drop out is being conducted as model activity
* **Service Facilities:** Strategies for early identification and rehabilitative procedures. films and audio visuals on vocational training and job placement, etc. are being developed
* **Community Programme:** Identification and intervention, home bound training, correspondence training and also tele–rehabilitation services are being rendered and evolved with emerging needs.
* **Material Development:** Required for (a) education, like teaching aids, audio–visuals etc. (b) public awareness and community education, literacy programme for adult deaf, Parent Counseling and Programme for strengthening voluntary organisations
* **Information and Documentation:** Documenting and disseminating the latest information and developments in the science of hearing, speech and related technology is being done

**National Institute for Empowerment of Persons with Multiple Disabilities (NIEPMD), Chennai:**

The Government has set up this new Institute at the total project cost of Rs.61.90 crores comprising of land cost of Rs.39.20 crores (notional), non-recurring cost of Rs.18.10 crores and a recurring cost of Rs. 4.60 crores. Government of Tamil Nadu has provided the land for this Institute. Government of India is providing the financial support for construction of the building of the Institute and other activities. The Institute has started clinical services and short-term training programmes for caregivers from July 2005.

**Services Provided:**

* Rehabilitation Medicine
* Physical therapy
* Occupational therapy
* Sensory Integration
* Early Intervention Services
* Prosthetics & Orthotics
* Special education
* Psychological Assessments and Interventions
* Speech, Hearing & Communication
* Vocational training
* Vocational Guidance & Counseling
* Deafblind
* Community based Rehabilitation
* Special Clinics (Psychiatric, Neurology & Ophthalmology)

**Swami Vivekananda National Institute of Rehabilitation, Training & Research (SVNIRTAR), Cuttack:**

NIRTAR, originally, started as an adjunct Unit of ALIMCO, Kanpur, NIRTAR was registered in 1984 under the Societies Registration Act, 1860 as a National Institute. The aims and objectives of the Institute are human resources development, implementation of service delivery programmes, research and outreach programmes.

It undertakes, sponsors or coordinates training for rehabilitation personnel and conducts research on bio-medical engineering and surgical or medical subjects for orthopaedically handicapped. The Institute produces and distributes aids and appliances. It develops models of service delivery programmes for rehabilitation. NIRTAR also undertakes vocational training, placement and rehabilitation of the physically handicapped.

**Services Provided:**

Patients with locomotor / orthopaedic disabilities due to various ailments like poliomyelitis, Cerebral Palsy, Congenital Deformities, Leprosy, Burn contracture, Paraplegia, Hemiplegia etc. and hearing and speech disabilities are treated and rehabilitated. Patients/ Persons With Disabilities requiring artificial limbs and other rehabilitation aids and appliances are provided to prevent the impairment leading to disability and to make them near normal and to carry on their activities for daily living. The rehabilitation is provided through the following infrastructure:

* 100 bedded hospital
* Two well equipped operation theatres for performing corrective and reconstructive surgeries
* Microsurgery
* Assessment Clinic consisting of Rehabilitation Specialists & professionals to evaluate the patients
* Radiological and Pathological investigation Units
* Cerebral Palsy Clinic
* Hand Clinic
* Speech Therapy
* Physiotherapy Unit
* Occupational therapy Unit
* Psychological Counselling
* Vocational Counselling, Training and Guidance
* Major Workshop for fabrication of Orthotic and Prosthetic Aids
* Workshop for Hand Splints
* Modern and Sophisticated Rehabilitation equipments

**National Institutes of Locomotor Disabilities (Divyangjan):**

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| National Institute for Locomotor Disabilities (Divyangjan) is an apex organization in the area of locomotor disability which came into the service since 1978 as an autonomous body under the ministry of Social Justice and Empowerment, Government of India. It is located in the city Kolkata and expanding its services whole country wide. |
|  |

**Objectives:**

* To develop Human Resource (manpower) for providing services to the Orthopaedically Handicapped population, namely training of Physiotherapists, Occupational Therapists, Orthotists & Prosthetists, Employment & Placement Officers and Vocational Counsellor etc. To conduct and sponsor research in all aspects related to the rehabilitation of the Orthopaedically handicapped. To provide services in the area of rehabilitation, restorative surgery, aids & appliances and vocational training to the persons with disability. To standardize aids and appliances and to promote their manufacturing and distribution
* To provide consultancy to the State Government and voluntary agencies. To serve as an apex documentation and information centre in the area of disability & rehabilitation

**Rehabilitation Services:**

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| * Disability Evaluation/Assessment * Medical/ Surgical management * Physiotherapy * Occupational Therapy * Prosthetic & Orthotics * Socio-economic Rehabilitation * Clinical Social work * Vocational Counseling and Planning * Special Education |
|  |
| * Clinical Social work * Vocational Counseling & Planning * Special Education |
|  |
| * Out Reach Services  Diagnostics services as Radiology (X-Ray), Urodynamics, Pathology, Electro-diagnostic tests (EMG, NCV)  Special Clinics |
| Geriatric clinic  Check Out clinic |
| * Indoor medical and surgical wards * Operation Theatre   **National Institute for the Empowerment of Persons with Visual Disabilities (Divyangjan):**  The National Centre for the Blind was upgraded as National Institute forthe Empowerment of Persons with Visual Disabilities (Divyangjan) in July, 1979. It was registered as an autonomous Institution under the Societies Registration Act, 1860 in October, 1982. The objective of the Institute is to conduct, sponsor and coordinate all aspects of education for rehabilitation of persons with visual disabilities and coordinate research in these areas. The Institutes also assisted in running a Composite Regional Centre (CRC) for persons with disabilities at Sundernagar in Himachal Pradesh.  This apex level Institute is engaged in education, vocational training, training of teachers and other personnel, research and development of service modules, production of Braille books, aids and appliances for the visually handicapped. |

**Objectives:**

* To conduct, sponsor, co-ordinate and/or subsidize research in collaboration with other NGOs and research organizations including Universities into various dimensions of the education and rehabilitation of the visually impaired
* To undertake, sponsor, co-ordinate or subsidise research into biomedical engineering leading to the effective evaluation of special appliances/instruments or suitable surgical or medical procedures or the development of new special appliances/instruments
* To undertake or sponsor the training of trainees and various specialized professionals including Teachers, Employment Officers, Psychologists, Vocational Counsellors and such other personnel as deemed necessary
* To distribute, promote, or subsidise the manufacture of prototypes and to manage distribution of any or all devices designed to promote any aspect of the education, rehabilitation or employment of the Visually Impaired

**Services:**

* + Department of Special Education
  + Department of Vocational Training/Training Centre for the Adult Blind
  + Department of Psychology: Counselling and Crisis Intervention
  + Model School for the Visually Handicapped
  + Braille Development Unit
  + Design and Development Unit
  + Rehabilitation and Consultancy Unit
  + Placement Unit
  + National Talking Book Library
  + National Library for the Print Handicapped
  + Central Braille Press
  + Workshop for the Manufacturing of Aids and Appliances
  + Mass Media Unit

**National Institute for the Empowerment of Persons with Intellectual Disabilities (Divyangjan):**

**National Institute for the Empowerment of Persons with Intellectual Disabilities (Formerly National Institute for the Mentally Handicapped)** established in the year 1984 at Manovikasnagar, Secunderabad (AP) is an Autonomous Body under the administrative control of Ministry of Social Justice & Empowerment, Government of India and thus the institute is fast approaching towards its silver jubilee to celebrate its dedicated services to persons with mental retardation in the national interest. The institute endeavors to excel in building capacities to empower persons with mental retardation.  Since the quality of life of every person with mental retardation is equal to other citizens in the country, in that they live independently to the maximum extent possible and through constant professional endeavors, National Institute for the Empowerment of Persons with Intellectual Disabilities (Formerly National Institute for the Mentally Handicapped) empowers the persons with mental retardation to access the state of the art rehabilitation intervention viz., educational, therapeutic, vocational, employment, leisure and social activities, sports, cultural programmes and full participation.

**Objectives:**

* Human Resources Development
* Research and Development
* Development of models of care and rehabilitation.
* Documentation and dissemination.
* Consultancy services to voluntary organizations
* Community Based Rehabilitation
* Extension and Outreach programmes

**National Trust for the Welfare of Persons with Autism, Cerebral Palsy, Mental Retardation and Multiple Disabilities, New Delhi:**

The main objectives of the National Trust are to enable and empower persons with disabilities to live as independently and as fully as possible, to extend support to registered organisations providing need based services, and to evolve procedure for appointment of legal guardians for persons with disabilities requiring such protection. The Government of India has provided Rs.100 crores toward the corpus of the Trust. The income generated from the corpus is utilized to implement its programmes.

The State Nodal Agency Centres (SNACs) provide coordination assistance at the State level to enable the National Trust to implement its programmes, disseminate information and train parents and professionals. The SNACs function as Information Centres, facilitators, project mentors, training centers, LLC activators and networkers.

**Pandit Deen Dayal Upadhyaya Institute for Persons with Physical Disabilities (Divyangjan):**

**Pt. Deendayal Upadhyaya National Institute for  Persons With Physical Disabilites** is an autonomous organization under the administrative and financial control of Ministry of Social Justice & Empowerment, Government of India. The Institute for the Physically Handicapped came into being when the erstwhile Jawahar Lal Nehru Institute of Physical Medicine and Rehabilitation and other allied institution run by the council for the Aid of crippled & handicapped were taken over by the Government of India on 22nd May 1975 and converted into an autonomous body in the year 1976. It was renamed after Pandit. Deendayal Upadhyaya in the year 2002.

**Objectives:**

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| --- |
| * To undertake the training of Physiotherapists, Occupational Therapists and other such professionals needed for providing services to the disabled persons * To offer education, training, work-adjustment and such other rehabilitation services as the society may deem fit to orthopedic disabled persons with or without associated mental retardation * To undertake the manufacturing and distribution of such aids and appliances as are needed for the education, training and rehabilitation of the disabled persons * To provide such other services as may be considered appropriate for promoting the education and rehabilitation of the disabled persons, including organizing meetings, seminars and symposia * To undertake, initiate, sponsor or stimulate research aimed at developing more effective techniques for the education and rehabilitation of the disabled persons * To co-operate with national, regional or local agencies in research or such other activities as may be designed to promote the development of services for the disabled persons * To undertake or sponsor such publications as may be considered appropriate. * To do such other things as may be necessary or incidental to the realization of the above objectives |

**Services:**

* Assessment Clinic
* Occupational Therapy
* Physical Therapy
* Speech Therapy
* Workshop
* Social and Vocational
* Psychological Counselling

**Outreach Services:**

The workshop division is extending sophisticated Prosthetic, Orthotic & Rehabilitation aids and appliances to Persons with Disabilities through District Disability Rehabilitation Centre (DDRCs). The outreach comprehensive rehabilitation camp are organised in collaboration with other National Institutes, DDRCs, reputed Non-Governmental organisations. The support of District Administration is also taken. The tailor-made appliances are fabricated in the workshop with in the stipulated time frame. These services are provided at the doorstep of the disabled persons through camp approach. These activities are performed under the supervision & guidance of qualified Rehabilitation Professionals.

**Composite Regional Centers for Persons with Disabilities (CRCs):**

To overcome the lack of adequate facilities for rehabilitation of Persons with Disabilities, the Ministry of Social Justice & Empowerment has set up seven Composite Regional Centres for Persons with Disabilities at Srinagar (J&K), Sundernagar (Himachal Pradesh), Lucknow (U.P.), Bhopal (M.P.), Guwahati (Assam), Patna (Bihar), Ahmedabad (Gujarat) and Kozhikode (Kerala) to provide both preventive and promotional aspects of rehabilitation like education, health, employment and vocational training, research and manpower development, rehabilitation for persons with disabilities etc.

**5.7 Let Us Sum Up**

It is a major sociological theory in the study of social movements which emerged in the 1970s. It emphasizes the ability of a movement's members to 1) Acquire resources and to 2) Mobilize people towards accomplishing the movement's goals.

**5.8 Check your progress**

1. **Explain about various government agencies for aids and appliances.**
2. **Explain about various non government agencies for aids and appliances.**
3. **Describe about various government schemes.**
4. **Elaborate the eligibility criteria for availing funding under government schemes.**
5. **Briefly explain procedure for availing funding from different agents.**
6. **Describe in details about challenges encountered with cost involved in maintenance of devices after availing funding and ways to overcome.**
7. **Point out in details about various agencies or strategies to locate required human resources for various services and referrals.**

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