PROJECT PROPOSAL

FOR

ESTABLISHMENT OF

TRAINING CENTRE

FOR

DEVELOPMENTAL AGENCIES

IN THE FIELD OF

ENVIRONMENT, INFORMATION, APPROPRIATE TECHNOLOGY AND RURAL DEVELOPMENT

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P R E A M B L E

In most of the developing countries, plans and programmes aimed
towards development and transfer of environment friendly
technologies and training for adoption of these technologies
have not come upto the expectation of planners and
implementators, due to improper and inadequate supply of proper
know-how and data i.e. information in the requisite form.
Transfer of scientific and technological information to
scientists, engineers, educationist and to the general public is
every bit as important as the search for information and its
transfer to professional colleagues, which is usually seen as the
primary role of the research scientist. It is said that we live
in an information society and that there has been an information
explosion during the present century. It means that informtion is
the most important single input into modern productive systems.
It is no longer land, labour or capital not even energy and raw
material. When we know enough when we possess enough information
it is possible to reduce greatly the requirements for any of
these inputs.

Technology is an important input for accelerating economic
development. The last two decades has witnessed an increasing
demand for international transfer of technology to developing
countries. The concern for environment friendly appropriate
technologies is mainly because the techno-economic environment
in which these technologies are developed and tested is
different from the one where these technologies are to be
implanted. Within a given society, technical change involves a
process of invention, innovation, and diffusion of new technique
by imitation and acceptance. But an accepted technology
transferred to another society involves commercial risks, a need
for adoption, and meets resistance to change, so that the
transfer becomes more an innovation than an imitative process.

Development, adaption, adoptation, and transfer of any technology
should not upset the ecological balance. For short as well as
long-term considerations. Poorly planned efforts to achieve
apparently rapid development, ignoring the long-term effect of
many technologies on the environments have resulted in serious
ecological damage. It is, therefore, essential to analyse the
environmental impact before the application and transfer of each
technology. Due regard should be given to the preservation and
enhancement of the environment in the choice of technologies and
in their transfer.

This is fact that in the last decade or so there has been a very
marked heightening of awareness to environment concerns.
Coverage by the mass media, together with public and privately

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sponsored information compaigns at national and international levels, have succeeded in giving the public a sense of the extent, seriousness and urgency of the environmental problems in the world today. This is no small achievement, given the nearly total ignorance, 15 or 20 years ago, of such matters which most people take almost for granted today. And given the difficulty of competing with masses of information being bombarded of those with access to modern mass media.

How have these basic messages about the environment been transmitted ? Largly by appealing to people on an emotional level, using striking pictures or graphics intended to make people stop, look and think. But such an approach, however effective, has limited educational impact, as little or no substantive information is conveyed. Yet a large body of scientific knowledge about the environment already exists, and research is providing new information all the time. But most of these information is accessible to scientist alone, as it is usually couched in technical language and presented in a way that a layman can neither appreciate nor understand. The need of today is to train and educate non-specialists about the environment by finding a middle ground between emotion and technical information is a major challenge facing scientists and communicators today.

As we know very well that the most valuable resource a country has is its "human capital" the skills, education and training of its people. There are example of some countries which have little land, little mineral resources and no oil, (Japan, Singapore and Switzerland) however, they have moved towards the top of the economic league and their citizens enjoy among the highest per capita incomes in the world. A great part of their economic success must be attributed to the high education and training levels. In a short twenty years, training has mushroomed into a large scale activity. This is so the world over. The immediate question is whether all this training activitiy, or even the greater part of it, can be justified by its results. The action question then is how it can be improved? Training must not used as a source of new information only, but rather as a means for changing behaviour for lasting improvement on the job. Training is the responsibility of three partners: the participant's organisation, the participant and the training (trainers) establishment/organisation.

With the view of above importance of training, and transfer of environment friendly technologies in the present society now the need is to start an effective training for professional development preferably of our network members and also to establish a strong consultancy on above mentioned topics.

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ABOUT THE INSTITUTION

The Institute of Engineering & Rural Technology (IERT) Allahabad, was started in 1955 as a Civil Engineering School in a small hutment as a private institution. Later on due to its good performance it was taken over by the State Government in 1962 and renamed as "Allahabad Polytechnic". Due to healthy traditions, ethical atmosphere and constructive contribution of the staff, the Polytechnic continued to expand phenomenally and imparted training in 16 Diploma Courses and 3 Management Courses. The Govt. of India later on established a Curriculum Development Centre in it for developing teaching and learning materials for Polytechnics. In 1970, a Training-Cum-Production Centre was also started without any financial support to provide the much needed practical experience to the staff and students and to develop appropriate atmosphere for providing the job oriented education. In 1976 the polytechnic entered the rural areas with a view to serve the surrounding areas and the society. To gave a new directions in Technical Education, Ministry of Education established Community Development Cell and also supported Rural Development Activities. Through this partial support the institute has established an Appropriate Technology Cell for R & D on renewable energy and agricultural fields. In 1980 this Allahabad Polytechnic was given the academic and financial autonomy and renamed as Institute of Engineering & Rural Technology, Allahabad. Since then considereable expansion has taken place particularly in Community Development, Rural Technology & Development and Rural Management work in the field and its professional courses for students. The Department of Non-conventional Energy Sources also established a Wind Energy Research and Development Centre in IERT, and it has successfully installed more than one thousand wind mills in all over India. After its successful work in the field of Wind Energy, Govt. of India has also established "National Wind Energy Test. Station" in IERT. Later on the Appropriate Technology cell was established as Centre for Development of Rural Technology by Govt. of India. Due to its achievements this Centre has become one of the most prestigeous activity of the Institute. This department has constantly been involved in the field of environmental protection, rural technology development and dissemination community development, technology transfer manpower development, awareness generation and propogation and popularisation of non-conventional sources and renewable sources of energy.

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ABOUT INFORMATION DIVISION

The Information Service Divison was first established in CDRT, IERT, Allahabad from its internal resources, to strengthen its (CDRT's) extension and information dissemination activities. Due to its innovative and successful activities in Information Science, very soon it has become a seperate department of IERT. Even after its limited resources now this Information Service Division is one of the leading information centres of the country dealing with the Rural Technology, Appropriate Technology, Renewable Sources of Energy and Environmental issues.

To strengthen its activities Information Division has approached many reputed organisations in the country as well as abroad for the financial support. Main organisations supported by the division are; International Development Research Centre, Canada, British High Commission (Donated precious books worth several thousands to its library), Department of Science and Technology, Govt. of India, Rajiv Gandhi Foundation, New Delhi, Council for Science and Technology, Govt. of India, UNICEF, German Appropriate Technology Exchange. Germany, ITDG, London etc. In 1989 International Development Research Centre has sanctioned a project to established "Rural Technology Information Service" with the objective to strengthen the information capabilities and also to improve and expand its services to users in the country. The Project was successfully implemented and achieved its objectives. After its completion IDRC has again sanctioned a three years project in 1993 entitled " An Indian Network for Environment and Rural Technology Awareness (India)". In view of fact that Information Division, Allahabad is one of the leading Information Centre of the country, its diversified role of developing the surrounding rural areas as well as supporting more than 250 Community Development Cell, and Centre for Development of Rural Technology many Govt. and Non-Government Organisations, and many active voluntary organisations, by providing technical support in the related fields. It needs to be adequately strengthened and reorganised its training and consultancy facilities.

MAIN ACTIVITIES OF INFORMATION DIVISION

As a result of these projects now the main activities of Information Division are:

1. Training programmes on Information Technology, Rural Technology, Community Development, etc.

2. In Job Training for Professionals in related fields.

3. Technical Query Service.

4. Consultancy Service

5. Establishment of National Network on Rural Technology & Community Development Information Services.

6. Rural Technology Library Services.

7. Audio-Visual Libary

8. Computerisation of Information Services.

9. Information Dissemination Activities through:

    - Organising Popular Lectures
    - Organising Poster Exhibitions
    - Organising Awareness Generation Camps
    - Organising Mobile Exhibitions on Renewable Energy Technologies.
    - Establishment of Environment Friendly Rural Technology and Energy Park.

10. Technology Transfer Activities

11. Evaluation of Projects

12. Conducting Surveys (Pre project and Post Project)

13. Conducting Seminars, Workshops and Training Programmes.

14. Publication of following documents:

    - Quarterly Journal in English:Rural Technology Journal
    - Quarterly Journal in Hindi: "Grameen Pradyogiki"
    - Publication of Rural Technology Manuals - on different topics.
    - Publication of 'Do-it-yourself' series booklets.

- Publication of Proceedings and Technical Papers of Seminar/Workshop & Training Programmes.

15. Publication of Directories

16. Publication of Bibliographies

ACHIEVEMENT OF IDRC SPONSORED PROJECT

Main achievements after the implementation of last two phases of IDRC's sponsored projects are as under:

1. Successful establishment of Rural Technology Information Centre at Institute of Engineering & Rural Technology, Allahabad.

2. Successful establishment of an effective Network on Environment and Rural Technology Awareness.

3. Establishment of Rural Technology Park for demonstration and information dissemination on environment friendly renewable energy technology devices.

4. Computerisation/Automation of Information Division including its Library.

5. Training of Staff Members in information Science in general and on Computerisation and documentation in particular.

6. Enrichment of Library with the procurement of precious books, microfiche and other autdio-visual aids on related fields.

7. Developed 10 Data-Base on different topics.

8. Organised 19 Nos. Workshops/Seminars on different topics.

9. Organised 51 Nos. Training Programmes on Rural Technology/information Science/Environment friendly Renewable Energy Technologies.

10. Organised 135 Nos. Awareness Generation Camps on Rural Technology and Environmental issues.

11. Organised 20 mobile exhibitions on Environment friendly energy technologies.

12. Organised 12 Meeting for Network Members/Organisation.

13. Organised Regional Surveys on Rural Technology.

14. Publication of following documents:

    a) Publication of Quarterly Journal in English entitled "Rural Technology Journal".

    b) Publication of Quarterly Journal in regional language Hindi entitled "Grameen Pradyogiki".

c) Publication of 44 Do-it-yourself Booklets on Income Generating Technologies.

d) Publication of 12 Technical Manuals on Environment friendly Technologies.

e) Publication of 08 Directories.

f) Publication of 10 Bibliographies.

g) Publication of 04 Proceedings and Technical Papers on National Seminars organised by the division.

h) Publication of 06 Course Materials.

i) Publication of 04 Training Manuals

j) Publication of 04 Survey Reports.

15. Developed following AV Aids:

a) Developed 08 Colour Slide Film Packages on different environment friendly rural technologies.

b) Developed 06 Audio-Visual Cassettes on adoption, operation and maintenance of rural technologies and stepwise manufacturing of Low Cost Transport i.e. Two Wheel Cycle Trailer.

c) About a dozen of Transparency Set on Low Cost Technologies and Environmental issues for Training purposes.

d) 15 Set of Colour Photo Album on Manufacturing, operation, usages and maintenance of Low-Cost, environment friendly rural technologies.

OBJECTIVES OF THE PROPOSE PROJECT

1. To study & evaluate the technical status of our Network Members in the field of Information Science.

2. To analyse the motivational factors for undertaking the new information technology.

3. To study the Socio-economic status of people (specially rural and poor people and farmers) for transfer of environment friendly technologies.

4. To Find out the acceptability of environment friendly non conventional energy technologies.

5. To determine the level of knowledge available to utilize these technologies.

6. To ascertain the extent of adoption of the recommended technology.

7. To assess the problems and constraints in the transfer of technology.

8. To make people conscious of positive effects by adopting environment friendly non-conventional energy technologies.

9. To strengthen the functional capabilites of our network member.

SPECIFIC OBJECTIVES

1. Job-oriented training for man-power development.

2. In-Service Information Science Training for Network Members.

3. Survey for transfer of environment friendly technologies.

4. Publication of Journals to support the technology transfer activities.

5. Awareness Generation Camps for adoption of these technologies.

6. Seminar/Workshop/Short Term Training Programmes on Technology Transfer.

7. Establishment of consultancy Cell on Information Science and for Transfer of Technology.

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TARGET AREA   :   All Over India

TARGET GROUP

Network members, and other Community Polytechnics and CDRT's, students and employees of technical institutions, rural/poor people and farmers, active voluntary agencies, services may be provided to Govt. organisation but on request only.

PHYSICAL TARGETS TO BE ACHIEVED IN PROPOSED FIVE YEARS

Ist Year:
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Target to be achieved in first year of the project are as under:

1. Establishment of a 'Training Centre' for training on Information Science as well as adoption, production, operation and maintenance of environment friendly, renewable energy technologies.

2. Constitution of Resource Panel for above training centre.

3. Survey of Rural Technology for transfer of Technology = 02 Nos.

4. Status Survey of active Community Development Cells = 02 Nos.

5. Orientation Workshops = 01 No.

6. Regional Workshop on Environmental issue = o1 No.

7. Training Programme for Technology Transfer = 02 Nos.

8. Training Programmes on Information Science = 02 Nos.

9. In Service Training for Personnel of Network Member Organisations = 02 Nos.

10. Network Tour to Strengthen the existing network = 02 Nos.

11. Awareness Programmes on Environmental Aspects = 04 Nos.

12. Publication of Rural Technology Manual = 02 Nos.

13. Publication of Half Yearly"Rural Technology Journal" in English = 02 Nos.

14. Publication of Half Yearly"Grameen Pradyogiki" in Regional Language i.e. Hindi. - 02 Nos.

IInd Year :
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Physical Target to be achieved in IInd Year of the Project are as under:

1. Survey of Rural Technology for Transfer of Technology = 02 Nos.

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2. Status Survey of Community Development Cells = 04 Nos.

3. Development of Software on Environment and Health Aspects =
    01 No.

4. Crash   Courses   on   Computer   Application   in   Information
    Management.

5. Network Tours to Strengthen existing Network = 02 Nos.

6. Following In-Service Training for Network Members:

    a) Data Base Management
    b) Use of CDS/ISIS for Documentation.

7. Establishment of Consultancy Cells on transfer of environment
    friendly rural technology.

8. Publication of Half Yearly Rural Technology Journal in
    English = 02 Nos.

9. Publication of Half Yearly Journal in Regional Language Hindi
    "Grameen Pradyogiki" = 02 Nos.

10. Publication of Rural Technology Manuals = 02 Nos.

11. Publication of Directory = 02 Nos.

IIIrd Year:

Physical Target for Third Year of the Project are as under:

1. Development of Software on Environment = 01 No.

2. Regional Workshop on Environmental Issues (Follow-up of Ist
    Year's Workshop) - 01 No.

3. Network Meeting of New Members - 02 Nos.

4. Development of Software on Health & Environment Aspects. - 01
    No.

5. Awareness Programmes for School Teachers on adoption of
    environment friendly renewable energy technologies.- 02 Nos.

6. Publication of Rural Technology Manual - 02 Nos.

7. Publication of Half Yearly Rural Technology Journal" in
    English - 02 Nos.

8. Publication of Half Yearly Journal "Grameen Pradyogiki" in regional language i.e in Hindi - 02 Nos.

9. Publication of Technical Papers and Proceeding of Regional Workshop on Environmental issues (Point 02 of the same year's target)

10. Crash Courses on:

    a) Computer Application in Information Management - 02 Nos.
    b) DTP for Documentation Centres - 02 Nos.
    c) CDS/ISIS for Professionals - 02 Nos.

IVth Year:

Main emplasis for IVth year of the project area on different type of trainings. The physical target are as under:

1. Trainers' Training for Production, Operation, Maintenance and Transfer of Environment friendly Renewable Energy Technologies. - 04 Nos.

2. Crash Courses on Computer Application in Information Mangement - 02 Nos.

3. Short-Term Training Programme on Data Base Management - 02 Nos.

4. Short-Term Training Programme on "Use of CDS/ISIS for Documentation" - 02 Nos.

5. Short-Term Training Programme on "DTP for Documentation Centres - 02 Nos.

6. Publication of Training Manuals on following topics:

    a)   Use of CDS/ISIS for Documentation.
    b)   DTP for Documentation Centres.
    c)   Computer Application in Information Management.
    d)   Data-Base Management.

7. Publication of Half Yearly "Rural Technology Journal" in English - 02 Nos.

8. Publication of Half Yearly Journal "Grameen Pradyogiki" in regional language Hindi. - 02 Nos.

Vth Year:

Physical Target for last year of the project will be as under:

1. Evaluation Survey of Network Members - 04 Nos.

2. Publication of Network Directory (up dated) - 01 No.

3. Publication of Rural Technology Manual - 02 Nos.

4. Publication of Half Yearly "Rural Technology" Journal in English - 02 Nos.

5. Publication of Half Yearly journal "Grameen Pradyogiki" in regional language i.e. Hindi - 02 Nos.

6. Regional Workshop on Technology Transfer - 01 No.

7. Awareness Programmes on Environmental Issues for Women - 02 Nos.