

# The CTARA-MoRD Research in Development Fellowships

Proposal V.2. (12th Feb. 2013, changes in *italics* in Items 2,8).

Milind Sohoni

Head, Centre for Technology Alternatives for Rural Areas (CTARA)

IIT Bombay.

The maturing of the Indian democracy in the new millenium now faces two important challenges, viz., increasing aspirations of its people and at the same time, severe resource and capacity constraints. These manifest themselves as demands, e.g., for *sadak, bijlee, pani*, and at the same time, diminishing oportunites for the poor and the asset-starved. The Indian state has tried to meet this situation through several schemes and programs such as the NREGA, Adarsh Gram Yojana and so on. It has also tried to strengthen governance by bringing much-needed monitoring capacity in the form of the PMRDF.

This proposal addresses the engineering research needs of development. As it stands, much of the demands of *sadak, bijlee, pani* constitute a demand for engineering services and solutions, with embedded social contexts and outcomes. These demands must be met by technologists trained in both engineering and applied social science skills, and with a knowledge of the discourse of development. Such professionals will bring value and desired outcomes at all levels—in civil society, NGOs, regional administrations and in companies and agencies working in the development sector.

CTARA was set up at IIT Bombay in 1985 precisely with the objective of supplying technological solutions to the development sector. Its methods have involved an understanding of both the technical and the social contexts. Its core values include working for the bottom 80%, in the core sectors of water, energy, agriculture, livelihoods etc., and for a concrete stakeholder. In 2007, CTARA started the M.Tech. program in Technology and Development (MTD), aimed at supplying technical professionals in the development sector. Its graduates now serve in NGOs, CSOs, consultancies, and development allied industry. Two were selected in the PMRDF program this year.

This note is to request **5 Research In Development Fellowships** for MTD students during their second year, and for 1 year subsequent to their graduation. Broadly speaking, the terms of the fellowship will be as follows:

1. The fellowship aims to incentivize research which is applicable in the development sector and aims to enhance the outcomes of flagship programs of MoRD. These programs include (i) the Mahatma Gandhi National Rural Employment Guuarantee Schemei (MG-NREGS), (ii) the Inregrated Watershed Development Program (IWMP), and (iii) the Pradhan Mantri Gram Sadak Yojana (PMGSY).
2. The fellowship will commence on July 1st of the second year of an M.Tech student of CTARA and will end on June 30th, two years subsequent to the award of fellowship. The areas of research will be as follows:

Program	MG-NREGS	IWMP	PMGSY
Number	2	2	1

MoRD could include any other scheme or sector of their current interest, *including in other ministries (such as rural drinking water)*.

3. The fellowship will require the student to pursue research in the award area through his/her M.Tech project. The guide will ensure that the outcome of the research aims to benefit the conduct of the MoRD program and enhances its outcomes. The fellowship will provide suitable finances, data and access to enable this research.
4. After graduation, the student will work for a period of 1 year in the program office. During this year, the fellow will help in the evaluation of projects, develop case-studies and analyse processes. The fellow will also have access to all research and analysis facilities of CTARA and IIT-Bombay, the library and faculty time.
5. The total fellowship award will be disbursed as follows:

Heading	Duration	Unit ('000 Rs.)	Amount
Scholarship	12 months	12	144
Internship at MoRD	12 months	60	720
Contingency	1 year	40	40
IIT/CTARA facilities	1 year	180	180
Total			1100
Institute Overheads		~ 20%	220
Grand Total			1320

Since institute norms require fellowship amounts to be commensurate with the MHRD norms (which are Rs. 8000 p.m.), we have pegged the proposed fellowship at Rs. 12,000 p.m. during the M.Tech. program.

6. The selection of the fellow will be based on the research proposal of the student for his M.Tech. project, and supported by his/her guide. The proposal will be evaluated for its applicability to the program, its possible significance and its innovation. The principal stakeholder for the proposal will be the Program Manager of the program and its beneficiaries, suitably represented.
7. Selections will be done by a review and selection committee consisting of CTARA faculty, MoRD representative and key external advisors, which will meet in June of every year, so that the fellows may begin their work on July 1.
8. The selection and review committee will review the annual progress of every fellow for each year and conduct an assessment of outcome in the month of March of the second year. *An extension of upto one year may be considered at this point (for example, to enable the fellow to finish an ongoing assignment).*