

**ASTRA -- PAST, PRESENT
AND FUTURE**

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**CHARACTERISTICS
OF A SUSTAINABLE
INSTITUTION**

- **Relevance**
- **Excellence**
- **Transparent, Accountable
And Participatory (TAP)
Self-governance**
- **Financial Viability**

CRITERIA OF RELEVANCE

- Applicability to rural areas
- Decentralised energy generation from local sources
- Improved end-use energy devices
- Low-cost Buildings
- Water for domestic and agricultural purposes
- Agro-industrial processes

FURTHER CRITERIA OF RELEVANCE

- Advances sustainable development
- Direct improvement of QOL
- Indirect improvement of QOL via income generation
- Empowerment of rural communities
- Environmental Soundness

CRITERIA OF EXCELLENCE

- Faculty attracted from other departments
- Refereed publications/technical reports
- Attendance of Seminars
- Courses
- Degrees (PhD, M Tech)
- Penetration of economy by ASTRA technologies

CRITERIA OF SELF-GOVERNANCE

- Faculty interaction (formal and informal)
- Transparent strategies and policies
- Accountability
- Participatory functioning and decision-making

CRITERIA OF FINANCIAL VIABILITY

- Core support for faculty salaries and basic functioning (~15%)
- Programme funding (~30%)
- Project funding (~55%)

INSTITUTE BUDGET (~15%)

- to support ASTRA's core expenses
 - for establishing and operating its Extension Centre
 - for its office at the Institute

DIVERSITY OF FUNDERS
(~30%)

- to support ASTRA's Information, Training, Research, Technology Generation and Advocacy activities

SPECIFIC DONORS
(~55%)

- to support on a project-by-project basis its large technology micro-dissemination projects

**PHASE I OF ASTRA'S
DEVELOPMENT
(1974-84)**

- (1) Integration of social concerns and technology
- (2) Legitimization of ASTRA within IISc and national framework

- **Development of awareness of rural conditions**
- **Identification of technical problems of relevance to rural areas**
- **Motivation of IISc faculty**
- **Establishment of Ungra Extension Centre**
- **Development of conceptual framework for generation and dissemination of technology for rural areas**

**PHASE II OF ASTRA'S
DEVELOPMENT
(1984-1990)**

- (1) Technology
Demonstration**
- (2) Departmentalization of
Governance**

- Transformation of ASTRA from cell (with Convenor but no faculty) to centre/ department (with Chairman and permanent faculty)
- Chula, low-cost housing and gasifier programmes
- Community biogas plant project
- Decrease in number of peer-reviewed publications
- Decrease in the number of seminars to build awareness and create interest in IISC

**PHASE III OF ASTRA'S
DEVELOPMENT
(1990-1997)**

- (1) Market-oriented liberalization
- (2) Marginalization of social concerns

- Post-1990 influence of LPG on ASTRA
- Dominant influence of funding agencies on design of projects
- Poverty driven off ASTRA's agenda
- Exclusion of people from technology choice and management
- Top-down government-type technology implementation

- Decrease of delivery/promise ratio
- Decrease of TAP-style of governance
- Secession of SUTRA from ASTRA
- Separate growth of successful GHG mitigation and Gasifier programmes

A WAY FORWARD FOR ASTRA

- Reaffirm Socio-economic Objectives
- Induct New People
- Strengthen Old Areas
- Initiate New Areas

**MILLENIUM AREAS
(IT, BIOTECHNOLOGY,
ETC)**

- Identify brainstorming groups (one/area)
- Groups with majority of new people
- Take them on field trips to villages
- Have brainstorming sessions on how area can advance Rural Development

**MILLENIUM
CHALLENGES**

- Literacy, Health, Drought, etc.
- Focused Workshops to develop programmes of work

S&T FOR PANCHAYAT LEVEL DEVELOPMENT

- Form ASTRA team (with Civil, Mechanical and Electrical Engineering, IT, Biotechnology and Systems expertise)
- Visit and understand PLD in states (e.g., Kerala)
- Formulate an S&T agenda to enhance PLD

LINKAGE WITH OTHER GROUPS

- Joint Seminar with other rural development groups
- ASTRA Web site

FRESH THRUST TO OLD AREAS

- Workshops with review presentations of 25 years of work
- Committees to generate fresh thrust
- 1/3 ASTRA veterans + 1/3 new faculty + 1/3 outside experts

REAFFIRMATION OF ASTRA'S GOALS AND STRATEGIES

- Workshops to reaffirm/redefine ASTRA's role in the context of LPG (Liberalization, Privatization and Globalization)

DEFINITION OF ASTRA'S ROLE IN THE INSTITUTE

- Interaction between Institute leadership and ASTRA faculty to define special role of ASTRA

REINVENT GOVERNANCE OF ASTRA

- Development of TAP (Transparent, Accountable and Participatory) style of governance