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EU-INDIA INNOVATION NETWORK PROJECT

White Paper

Future Direction of Research in the Cross-Cultural Context

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Future Direction of Research in the Cross-Cultural Context

We believe that knowledge based economy cannot be disaggregated from the cultural settings, and therefore there is an urgent need to focus on cross cultural networking and collaborations. The convergence of technologies, the new possibilities of communications and the growing interdependence of local / global economies require re-conceptualisation of human spaces in which pervasive IST tools can be shaped to support new types of human activities in the era of knowledge economy. The underlining concept of knowledge based economy involves the creation, propagation and exploitation of knowledge as components of the essential social and economic dynamics. This dynamics can only be understood from a holistic, trans-disciplinary perspective and therefore our focus is on the development of the human-centred framework for innovation. To us the challenge of network of excellence is to develop sustainable and transferable models of IST and social economic innovation, building virtual clusters of IST and innovation.

Our general approach is based on the thesis that knowledge drives economic and entrepreneurial innovations, which in turn drive innovations in new forms of socio-economic and technological innovations. This approach is guided by the human centred tradition, which is rooted in the methodology of action research and cross-cultural communication. Within this approach our view of synergetic innovation is about building symbiotic relationships between human capabilities and machine capacities.

We propose to set up a “virtual institute of cross-cultural innovation” to develop research strategies for the knowledge based economy. As an integral component of this ‘Institute’ will be the creation of a virtual network of postgraduate, doctoral and post-doctoral researchers to facilitate collaboration between the universities, enterprises and stakeholders through research projects, action research, case studies and feasibility studies. The focus will be on the transfer of knowledge from the universities and regional knowledge centres to the enterprises as well as the transfer of the tacit dimension of knowledge from the enterprises to the knowledge centres and the universities, both within and beyond the EU-India context.

We propose the setting up of an EU-Asia Scholarship Scheme by the European Commission to create a community of young researcher and research fellows to support and sustain cross-cultural research collaborations. The inclusion of universities and research centres from outside the EU-India network, will create a critical mass of researchers and practitioners who will participate in the creation of processes, mechanism and environments for integrating trans-disciplinary research and its spreading to the European, Indian as well as the international scientific and entrepreneurial community.

The cross-cultural and cross regional focus of the Virtual Institute will synthesise, consolidate and further develop the synergy of knowledge of IST innovations and their applications to knowledge based economy, entrepreneurial innovations, new forms of enterprise and learning systems

1. Virtual Institute of Cross-cultural Innovation – a proposal

1.1 The Purpose

The aim is to develop a cross-cultural network of knowledge, culture and innovation - a “virtual institute for cross-cultural innovation”, which will create a human-centred framework and collaborative mechanisms with the purpose of enhancing innovation capacities, value creation and cooperative performance of researchers, entrepreneurs and civic stakeholders, by mobilising universities, enterprises and regional knowledge centres into a trans-disciplinary networking for research within the cross-cultural settings. The purpose is to open up new possibilities in

research with a special focus on Information Society Technologies (IST) innovations and their applications in socio-economic and entrepreneurial innovations including rural development. This network taking a human-centred approach will develop new models and establish links of cross-cultural collaboration and innovation. By creating synergy through building links between centres of knowledge and innovation in Europe, Asia, and internationally, the network will extend excellence in knowledge, culture and innovation.

1.2 Objectives

Networking of universities, enterprises and regional knowledge centres with the purpose of:

- Developing new models of cross-cultural collaboration and innovation
- Refocusing of existing IST supported knowledge based models and practices of socio economic and entrepreneurial innovations
- Dissemination of knowledge based models and practices to wider communities of stakeholders in Europe and India, and international
- To build 'Trans-disciplinary' networking focusing on cross-cultural fusion within and beyond the EU-India context
- To create mechanisms and environments to facilitate trans-disciplinary research, building on proven models of collaboration
- To establish and extend a common knowledge base related to socio economic and IST innovations with the focus on workplace design to facilitate creativity and collaboration
- To build a system of trans-disciplinary doctoral and post-doctoral training based on virtual research environments
- To develop models for the effective extension and dissemination of knowledge, practices and processes of innovation
- To integrate the intellectual and the tacit dimensions of knowledge of the universities, enterprises and regional knowledge centres, through the methodology of human-centred research
- To develop models of capabilities and work skills building in order to enhance innovation capacities, value creation and cooperative performance through the methodology of action research
- To facilitate and accelerate the virtual clustering of innovation networks into a "Virtual Institute

1.3. Background

The network will build upon the work of the EU-India Cross-Cultural Innovation Network, and will draw upon the Framework Programmes of the EU, related EU-Asia collaborations under programmes such as the EU-India Economic Cross-Cultural programme, Asia-ICT, Asia Link, as well as the British Council, UNDP and UNESCO collaborations (see Annex I). It will also draw upon international collaboration on knowledge society and sustainable development. The successful networking experiences of cross-cultural innovations of the EU-India Cross-Cultural Innovation Network in the human centred research tradition, creating mechanisms for the extension and dissemination of knowledge and experiences both within and beyond the European and Indian context will provide a strong basis for mobilising this network.

The EU-India Cross-cultural Innovation Network project is collaboration between European Universities (Brighton; UWCN Wales; Aachen, Germany; IpL Bologna Italy; and DTU Lyngby Denmark) and Indian universities (DU, Delhi; NISTADS, Delhi; PAU, Punjab; and GLS, Gujarat). It is concerned with the fostering of proactive collaborations in applied research in socio-economic and entrepreneurial innovations through academic and entrepreneurial networking, including joint inter-university postgraduate and doctoral training programme, involving universities and entrepreneurs in the EU and India. The project is rooted in our commitment to human centred systems approaches in science and technology and our belief that the establishment of a direct relationship between university and industrial applications is central to

the fostering of proactive entrepreneurial and industrial cultures. The central aim of this cross-cultural collaboration is to make a sustainable contribution to the EC-India cooperation on the transfer, exchange of cultural models of innovation and entrepreneurship, especially their transferability between and across regions and cultures both within India and the EU.

Innovation to us refers to new attempts to bridge the gap between the university and the entrepreneurial world. The gap here also refers to the tension between the propositional knowledge of the university and the tacit knowledge of the user, as well as the tension between local and global perceptions of technology. We believe that any sustainable collaboration between the EU and Indian universities involves the enrichment of cooperation in applied research, knowledge and know-how, and central to this is the role of academic and entrepreneurial innovations in stimulating social and economic change. This involves the development of new techniques of problem definition and new modes of joint working and collaboration. At the heart of this project is the creation of proactive and cross-disciplinary activities.

We recognise that any sustainable cooperation on cross-cultural innovation necessitates a deep understanding of the traditions of social, economic, industrial innovations, as well as of the operational mechanisms for the integration of new technology into enterprise cultures. By extending the university network to entrepreneurs and entrepreneurial organisations, and by integrating exchanges of researchers with the ongoing processes of joint R & D projects, joint seminars, workshops and network forums, the project provides an integrated model for university collaborations in applied research and postgraduate training.

1.4. The Scope of the EU-India Innovation Network

The EU-India Innovation Network has established the foundation of a virtual institute, which provides a basis for long term sustainable cross-cultural collaboration. The sustainability of the network has been enhanced by:

- Increasing the visibility of Europe in India and of India in Europe through building long term links between the European and Indian universities, and developing new modes of collaborations between universities and between universities and entrepreneurs. By extending the university network to entrepreneurs both within the EU and India, the project has developed a model for dynamic two-way collaborations for enhancing cross-cultural presence in the two continents. By building upon the ongoing collaboration of the European partners through European inter-university networks, and by extending the work of Indian partners on national and international projects, this project complements existing work in innovation, and thereby creates a synergy with application areas of common priority to both the EU and Indian partners.
- Integrating exchanges of researchers with the ongoing processes of joint R & D projects, joint seminars, workshops and network forums, the project has developed an integrated model for university collaborations in action research. Through exchanges of academic staff and students, joint publications, publicity and dissemination in journals, informal and electronic forums, public lectures, concertation forums and conferences, the project has widened the scope for cross-cultural economic cooperation.
- Enabling active and proactive participation of project partners from the EU and India, complementing diversity of geographical regions and promoting common vision of action research, the project not only has ensured cooperative involvement but has also built upon the valorisation of diversity of the university and entrepreneurial dimensions. This focus on diversities and their influence on the practical modes of entrepreneurship can contribute to widening our scientific understanding and practical know-how of cross-cultural innovation.

- The project innovations include cross-cultural processes of applied research, combining staff mobility with the dissemination activities of the project. Applied research is conceived here as providing training experiences and orientation of young researchers to work systematically together with experienced researchers on the practical impact of research results and the transfer of the practical knowledge from the entrepreneurs to the researchers too. The distributed coordination and integrated management structure has been developed in order to reflect the multi-dimensional nature of the project.
- By focusing on direct links between applied research and the productive sector, and on the role of new media in enabling such links, the project has developed new models of interaction between the university and entrepreneurs. By integrating the university dimension with related key areas of the entrepreneurial dimension, the network provides a new media based framework for supporting multi-disciplinary applied research, new forms of links between universities and entrepreneurs, and new forms of learning and earning and support.
- By providing a knowledge resource for collaborative learning and knowledge transfer, thereby contributing to the sustainability of existing collaborations and providing new possibilities of practical cooperation between academics, entrepreneurs and social actors within cross-cultural environments.

2. A proposal for an EU-Asia Scholarship Scheme

Building upon the experiences of the EU-India Cross-Cultural Innovation Network in EU-India collaboration in R&D activities, and developing operational models of postgraduate and doctoral training, we feel that there is a need to set up an EU-Asia Scholarship Scheme funded by the European Commission under its International Cooperation Programme. The objective is to facilitate links and stimulate future cross-cultural collaboration between Europe and Asia by setting up an EU-Asia Scholarship scheme for researchers from EU and the Asian countries. This scheme will build upon the existing EU fellowships and research training programmes such as the Marie Curie Fellowships and research training networks, and the Human Potential programme of the Fifth Framework programme. It will also draw upon other EU-India collaborative project under the EU-India Economic Cross-Cultural Programmes as well as EU-Asia programmes such as the Asia Link and Asia ICT (see Annex II).

The proposed EU-Asia Scholarship Scheme contributes to the International cooperation in the field of research and technological development (RTD):

- Participation of researchers from Asian Countries in the Framework Programme leading to the construction and strengthening of links between these countries and the Community.
- Closer co-operation between the Community and Asian institutions involved in research activities and S&T policy development and their participation in activities of Framework Programme will strengthen the overall coherence of collaborative research in Europe and Asia.

2.1 Aim

The aim is to increase and reinforce cross-cultural economic cooperation between the EU and Asia, enhance European Commission's scientific and technological capacity, and to encourage young researchers to enhance their experience in an international, cross-cultural and trans-disciplinary environment. The scheme will support and facilitate research collaboration through doctoral and post-doctoral scholarship and research fellowships. "Training through research" will be the guiding principle.

2.2 Objectives

- pro-actively foster the cross-cultural co-operation between academia, enterprises and knowledge centres
- to increase the innovation potential of R &D centres, enterprises and knowledge centres in the cross-cultural settings

This objective will be achieved via enabling and facilitating the access of researchers universities, R&D institutes, knowledge centres and enterprises, particularly small and medium sized enterprises (SMEs) – Europe-wide. The targeted researchers will be at the doctoral, post-doctoral and experienced level. Therefore, adequate technological competence, expertise and resources of the involved institutions will be a pre-requisite in order to guarantee high-quality opportunities for the trainees. Collaboration between university and enterprise in hosting researchers will be encouraged and supported by the Scholarship Scheme.

Strategic objectives

- to promote research co-operation between undertakings, organisations and researchers from Asia and from the Community, likely to produce significant, mutual and balanced benefits, taking into account the different needs and circumstances of individual groups of countries and regions whilst respecting the protection of intellectual property;
- to facilitate access for research centres and undertakings established in the Community to scientific and technological knowledge available outside the Community and useful to the Community's interests;
- to enhance the position and role of Community research in the international scientific and technological arena and to promote a European scientific and technological culture, taking account of the social and cultural needs of the countries with which it is co-operating;
- to contribute to the sustainable economic, social and technological development of the Asian countries;
- to help European research players acquire information and gain experience of research capacity, activity and priorities of developing and "emerging economy" countries, so as to make Community industry more competitive and enhance its presence on new markets.

2.3 Innovation Aspects

With the help of the scholarship initiative, universities, enterprises and knowledge centres, and researchers in Asia will gain experience of the European research and technological developments through their involvement in research at the European universities, R &D institutions and industry. It will be supported through international research collaborations programmes of the EU, as well as the Framework programme of the EU.

With this experience Asian institutions and researchers will be able

- to get involved in trans-national co-operative and collaborative RTD projects,
- to establish and achieve the necessary contacts for future joint projects via the highly qualified fellow scientists,
- to establish scientific interactions and exchange with universities and research centres active in the respective fields of cross-cultural collaboration
- to devote the necessary time and resources for setting up future international co-operative and collaborative projects.

This scholarship scheme will facilitate the access of highly qualified researchers (at the graduate, post-doctoral & equivalent, and experienced level) to the EU institutions, thereby providing a research expertise for European R &D centres and enterprises.

The scholarship initiative will pro-actively contribute to an increase in university–enterprise interaction & co-operation in socio-economic and technological sectors. Furthermore, the institutions involved will gain a positive experience with the fellows they are hosting, they will be strongly inclined to explore and initiate future research and entrepreneurial collaboration between EU and Asia.

The EU-Asia Scholarship initiative in targeting at training through research in an advanced technological and entrepreneurial environment, will increase the exchange of researchers between Europe and Asia. With the increasing international economic cooperation between EU and Asia, the number of researchers getting adequate training through research in European universities, R &D Centres and companies will significantly increase in the sectors of mutual benefit to Asia and Europe, particularly Information and communication technologies. Thereby, the careers of the engaged researchers will not only be enriched by the trans-national experience in technologically advanced companies. They will also get the opportunity to work in an entrepreneurial environment. This experience might encourage them to see an entrepreneurial career as an additional and complementary opportunity for their further professional development. In addition, this experience might encourage them to set up small start-up companies themselves.

Economic impact

The EU-Asia Scholarship initiative will have a significant socio- economic and technological impact in Asian countries by increasing the research capacity of researchers.

2.4 Coordination of the Scholarship Scheme

There is a need to set up a very strong and compact EU-Asia Network of experienced intermediaries and expert organisations to provide a framework for a visible European initiative providing RTD information and assistance to SMEs in their effort to internationalise and innovate. Efficient and target-oriented activities are most effectively done by a collaborative network of expert and institutions at European- Asian level. In organisational terms, the basic concept of the EU-Asia Scholarship initiative needs to be well co-ordinated co-operation between expert organisations at cross-cultural and cross-continental level. Thus making sure, that potential proposers are provided with the best possible service and assistance.

We feel that the proposed Virtual Institute of Cross-Cultural Innovation will be able to provide an integrated coordination service for universities, enterprises, knowledge centres and researchers interested in participating successfully in the EU-Asia Fellowship Scheme as well as the European Framework fellowship programmes. This service includes raising the awareness amongst researchers, civic society and industry, offering information on the fellowship scheme, and providing targeted assistance and coaching in the entire process of EU proposal preparation including finding the best possible fellowship partners.

3. International Cooperation and Networking: context

The issues raised in this white paper are very much part of debates on Information Society, global knowledge economy, and sustainable development. The idea of a virtual institute of cross-cultural innovation complements many of the programmes and initiatives of diverse organisations such as the European Commission, UNDP, UNESCO, World Bank, Media Lab Asia, the Grassroot Innovation Institute of India, and the British Council The networking structures of these inter-

regional and local-global collaborations provide opportunities to draw upon and learn from the trans-disciplinary activities of these initiatives to build a network of universities, knowledge centres and enterprise for creative innovation.

For example the vision of the Common Research Area of the European Union and the framework models of the Networks of Excellence and Integrated Projects, provide a new direction of research into complex social, economic and technological systems with both in the cross-regional, cross-cultural contexts. The priority area of the sixth programme of the EU, such as **Information Society technologies, Citizens and Governance in a Knowledge-based society, Sustainable development, global change and ecosystems, The Growth programme, provide challenging opportunities for building cross-cultural and trans-disciplinary networks of excellence.**

The simple and yet far reaching vision of Information Technology Society (IST) programme of the EU: "Our surrounding is the interface" extends the debate on Information Society from a techno-centric agenda of the past to a broader societal agenda of the knowledge society. It illustrates this vision through its emphasis on providing a universe of integrated services, enabling citizens to access IST services wherever they are, whenever they want, and in the form that is most "natural" for them. By emphasising this societal perspective, the IST programme exemplifies how the Fifth Framework Programme (FP5) of the EU has been conceived to help *solve problems* and to respond to major *socio-economic challenges* facing the European Union. It focuses on a limited number of objectives and areas combining technological, industrial, economic, social and cultural aspects. The three basic principles for implementing specific activity programmes as well as the RTD activities, can be used as guiding principles for sustainable development initiatives:

- * *European "value added" and the subsidiarity principle*, for example, to reach a critical mass or contribute to solving problems of a European dimension,
- * *Social objectives*, such as quality of life, employment or protection of the environment in order to meet the expectations and concerns of the Union's citizens,
- * *Economic development and scientific and technological prospects* in order to contribute to the harmonious and sustainable development of the European Union as a whole.

The Human Potential Programme of PFV, provides a model for networking of researchers, entrepreneurs and communities of practice for the preservation and development of knowledge potential through creating support processes and mechanisms for the training and mobility of researchers and by enhancing access to research infrastructures.

Networking initiatives of UNDP, UNESCO, Media Lab Asia, the Grassroot Innovation Institute of India, and the British Council, provide developmental models for knowledge society. The UNDP's initiative, The Global Cooperation Framework (GCF) aims to contribute to the overarching efforts of UNDP to reduce poverty and promote Sustainable Human Development. The development objective of the GCF is to provide windows for developing countries to influence global trends and benefit from global knowledge on critical dimensions of sustainable human development in order to reduce national poverty and human inequity.

The trans-disciplinary initiative, "Learning Without Frontiers" (LWF) represents UNESCO's proactive response to addressing the deep social and political problems that confront humanity as they relate to the role of learning in society. It views the processes of engaging in collaborative, multi channel and innovative learning as being critical for both the development of the individual and the building and linking of culturally diverse communities.

The World Bank Institute proposes a commitment to poverty reduction and sustainable development through the creation and support of knowledge networks related to international economic and social development. Its focus on the use of the latest technology to connect the developing world with world-wide knowledge and expertise, and the creation of learning centres

at universities, institutes, and other organisations throughout the developing world offers a model for "global dialogues" fostering the free exchange of information.

Media Lab Asia, a collaboration between MIT Labs and Indian institutes propose to create the world's largest academic research program dedicated to bringing the benefits of new technologies to everyone, with a special focus on meeting the grand challenges in learning, health, and economic development. Its focus on facilitating the invention, refinement, and dissemination of innovations through its work with industry, NGOs, and governments, to bring these innovations to every village in Asia. Media Asia Lab sees its success in combining the creativity of entrepreneurs with the technical know-how of universities, and cultivation of sustainable and culturally appropriate solutions, particular operating in many different languages, as well as supporting local culture and tradition.

The National Innovation Foundation Initiative of India brings to the very heart of sustainable development the richness of the tacit dimension knowledge embedded in grassroot innovations and the human-centred perspective of knowledge networking. The strength of this innovation model is reflected in its emphasis on strengthening R&D linkages between excellence in formal and informal knowledge systems, and its focus on promoting wider social awareness and possible commercial and non-commercial applications of innovations, as well as its focus on incorporating the same in education curriculum, development programs and policies. The significance of its commitment to sustainable development also lies its focus on developing sustainable technologies without social and economic handicaps affecting evolution and diffusion of green grassroots innovations. Its networking innovation in scouting, spawning, sustaining and scaling up of grassroots green innovations and linking innovation, enterprises and investments, provide a model for grassroot based innovation models for developing economies.

The British Council initiative GKP (Strategy 2005) has a vision of a world of equal opportunities where all people are able to have access to and use knowledge and information to improve their lives. It focuses on Global Knowledge Partnership in an evolving network of public, private and not for profit organisations. It emphasises the sharing of information, experiences and resources to realise the potential of information and communication technologies to improve lives, reduce poverty and empower people.

Asia ICT is one of the series of EU initiatives under its International cooperation with third countries. It promotes the EU network model of R & D to stimulate the societal applications of ICT in the digital knowledge-based society. This initiative covers areas of application such as the wider social and economic advancement in the Society context; the stimulation of the paradigm shift from the teaching to learning in the education context; the potential to offer a multitude of benefits arising from ICT supported health care and medicine in the Health context; the role of Information technology in facilitating the survival and sustainability of agriculture and farmers in the interdependence of world markets through globalisation, and emergence of new markets in Asia and changing government policies to include assistance and, addressing the need to increase production through the transfer of the benefits of technological innovation. This wider societal context of the ICT initiative, also covering area of e-commerce, transport, tourism and I-manufacturing, provides an opportunity to stimulate R&D through networking of universities, enterprises and knowledge centres in socio-economic and entrepreneurial innovations.

Through its focus on promoting the creation of new partnerships and new sustainable links between European and Asian higher education institutions, and to reinforce existing partnerships, the Asia-Link Programme of the European Commission provides a model for the promotion of regional and multilateral networking between higher education institutions, The ASEAN-EU UNIVERSITY NETWORK PROGRAMME (AUNP) illustrates the emergence of networking models of the EU-Asia cooperation for improving mutual understanding between the two continents, and developing co-operation by strengthening the existing network of co-operation

among higher education institutions and promoting collaborative studies and research programmes.

Annex I

1. Thematic Area of Research in the Sixth Programme of the EU (FP6)

1.1 Information Society technologies

Information society technologies (IST) are transforming the economy and society. Not only are they creating new ways of working and new types of business, but provide solutions to major societal challenges such as healthcare, environment, safety, mobility and employment, and have far reaching implications on our everyday life. *It will ensure European leadership in the generic and applied technologies at the heart of the knowledge economy.* It aims to increase innovation and competitiveness in European businesses and industry and to contribute to greater benefits for all European citizens.

The actions will therefore mobilise the community of researchers around medium to long term objectives, facilitating the integration of public and private effort on a European scale, to build essential competencies and strengthen innovation.

Although substantial advances have been achieved, we are still far from taking full advantage of the potential of knowledge-based services in real life. Products and services are still hard to use and out of reach for many people, and the "digital divide" is widening within Europe and across the world. *Research will focus on the future generation of technologies in which computers and networks will be integrated into the everyday environment, rendering accessible a multitude of services and applications through easy-to-use human interfaces. This vision of "ambient intelligence" places the user, the individual, at the centre of future developments for an inclusive knowledge-based society for all.*

The IST priority in support of the eEurope action plan, will help build an information and knowledge based society across Europe, encouraging the participation of least developed regions. It will also include activities linking the EU effort to the international context. The aim is to achieve thematic area global consensus when appropriate e.g. through the Intelligent Manufacturing Systems (IMS) initiative or the dialogue on dependability issues, to integrate further the research of the Newly Associated States within the EU effort and to facilitate co-operation with developing countries.

In addition to the above, the priority thematic area will support research to investigate and experiment with future visions and emerging technologies at the frontier of knowledge in the IST field.

1.2 Citizens and Governance in a Knowledge-based society

The overall objective is to provide a sound knowledge base for the management of this transition, which will be conditioned by national, regional and local policies, programmes and actions, as well as informed decision making by individual citizens, families and other societal units.

Given the complexity, breadth and interdependence of these challenges and the issues involved, the research approach adopted must be based on greatly enhanced research integration, multi and transdisciplinary cooperation, and on the mobilisation of the social sciences and humanities research communities in Europe in addressing them. Activities will also facilitate the identification of medium to long term societal challenges arising from research in social sciences and humanities and will ensure the active participation of key societal stakeholders and the targeted dissemination of the work carried out. In order to support the development of comparative transnational and interdisciplinary research, while at the same time preserving the diversity of research methodologies throughout Europe, the collection and analysis of better and more genuinely comparable data and the coordinated development of statistics and qualitative and quantitative indicators in particular in the context of the emerging knowledge society at the European level is essential.

1.3 Sustainable development, global change and ecosystems

Sustainable Development in the form of global change, energy security, sustainable transport, sustainable management of Europe's natural resources, and their interaction with human activities motivate this research priority theme. The activities carried out within this priority aim at strengthening the scientific and technological capacities needed for Europe to be able to implement a sustainable development model in the short and in the long term, integrating its social, economic and environmental dimensions, and make a significant contribution to the international efforts to mitigate or even to reverse current adverse trends, to understand and control global change and preserve the equilibrium of ecosystems.

1.4 The Growth programme

The main targets of the Competitive and Sustainable Growth Programme are:

- * to produce, disseminate and use the knowledge and technologies needed to design and develop processes and produce high quality, environment- and consumer-friendly products which will be competitive on tomorrow's market;
- * to help increase economic growth, maintain and/or create new jobs in Europe;
- * to sustain the continuing innovation and modernisation efforts of manufacturing, processing and services enterprises (including SMEs) so as to improve their competitiveness;
- * to support the development and implementation of Community policies that enable competitive and sustainable development.

This goes hand in hand with the development of related services, including transport, which are economic, safe and protective of the environment and quality of life as well as with the development of quality materials, reliable measurement and testing methods and the optimal use of specific research infrastructures.

Competitiveness and sustainability require a "systems approach" in which research activities support the development of coherent, interconnected and eco-efficient industrial and social systems, responding to both market and social needs.

1. 5 Information Society Programme (FP5)

Programme objective: A User-friendly information society

The IST Programme has four inter-related specific objectives. For the private individual, the objective is to meet the need and expectation of high-quality affordable general interest services. For Europe's enterprises, workers and consumers, the objective is to enable individuals and organisations to innovate and be more effective and efficient in their work, thereby providing the basis for sustainable growth and high added-value employment while also improving the quality of working life. In the sector of multimedia content, the key objective is to confirm Europe as a leading force, realising its full potential. For the enabling technologies which are the foundations of the information society, the programme objective is to drive their development, enhance their applicability and accelerate their take-up in Europe.

The vision, on which the Programme directions are based, is very simple: "Our surrounding is the interface" to a universe of integrated services. This will enable citizens to access IST services wherever they are, whenever they want, and in the form that is most "natural" for them. While directly targeting the improvement of quality of life and work, the vision is expected to catalyse an

expanse of business opportunities arising from the aggregation of added-value services and products.

The Programme orientations can be summarised by the following vision statement:

"Start creating the ambient intelligence landscape for seamless delivery of services and applications in Europe relying also upon test-beds and open source software, develop user-friendliness, and develop and converge the networking infrastructure in Europe to world-class".

European added value: Realising the full potential of the information society requires technologies, infrastructures, applications and services, accessible and usable by anyone, anywhere, anytime, whether it be for business or individual use. Collaborative research and technological development is needed to create both the critical efforts and the interoperability necessary to ensure this in Europe. Pan-European research is also needed to ensure that content, together with its creation and use, properly reflects and exploits the EU's cultural diversity and many languages.

European competitiveness: Information society technologies are integrated in, or support products and processes in all sectors of the economy. To be competitive in the global marketplace, Europe needs to master both the supply and use of information society technologies. To this end, the Programme integrates a wide range of actions to stimulate the development and take-up of information society technologies and to ensure that the conditions and requirements for their use can be met.

Socio-economic needs and EU policies: The IST Programme supports EU policies, notably in employment, social cohesion and competitiveness; in fostering the convergence of information processing, communications and media, and in ensuring interoperability and coherence at a global level. The Programme therefore foresees *"close articulation between research and policies needed for a coherent and inclusive Information Society"*.

Integration

Integration at the programme level will be an important feature of the IST programme. Firstly, the issues of usability, interoperability, dependability and affordability will be addressed ubiquitously throughout the Programme. Secondly, clustering (see below) and concertation will be used to focus, coordinate and integrate activities. Thirdly, Cross-programme actions will be initiated which will focus on a limited number of specific issues relevant to the entire Programme.

Clustering

Given the integrated nature of the programme, projects are encouraged to work together, to pool and to collectively build on their individual results whenever it makes sense to do so. Project clusters, each with their own specific objective, will be actively supported and encouraged in so far as they add value to the results of the IST programme seen as a whole. Whilst remaining a voluntary activity, it is anticipated that projects will find it to be in their own interest - and so worthwhile - to actively contribute to the work of specific clusters.

Clusters may centre on a specific Action Line or Key Action, but most are expected to be Cross Programme in nature. These will span more than one Key Action, and may include one or more external bodies as target recipients for their results. Individual clusters may be awarded a supplementary contract to support their work, where their participants have collectively submitted a proposal requesting this.

1.6 The Human Potential Programme: a model for future EU-India Networking

Rationale

The world is increasingly based on knowledge. The Community's prime asset in this area is the quality of its researchers, engineers and technicians. The aim is to preserve and help develop this knowledge potential through greater support for the training and mobility of researchers and by enhancing access to research infrastructures.

The Community also has a solid tradition of research in social and economic science and the humanities, which needs to be mobilised to identify economic and social trends and requirements, both current and future, in order to contribute to the Community's competitiveness and quality of life of its citizens.

General Objectives

The general objectives of this programme, to be realised in concert with related activities elsewhere in the Framework Programme, are centred on two main areas of activity, to improve the human research potential and to strengthen the socio-economic knowledge base. To this end, actions will be undertaken:

- * to develop the Community's human research potential, making special efforts to ensure equality of access and a better balance between men and women, notably through the training and mobility of researchers so as to contribute, inter alia, to efforts for creating new jobs;
- * to help make the Community an attractive location for researchers and to promote European research in the international arena and to promote a European scientific and technological culture;
- * to strengthen, through a specific key action, the socio-economic knowledge base for a better understanding of key problems facing European society;
- * to help develop scientific and technological policies and other Community policies.

2. The UNDP Initiative: Poverty Reduction

2.1 Global Cooperation Framework

Influencing global trends and benefiting from global knowledge to reduce poverty and human inequity

The Global Cooperation Framework (GCF) is a means to contribute to the overarching efforts of UNDP to reduce poverty and promote Sustainable Human Development. The development objective of the GCF is to provide windows for developing countries to influence global trends and benefit from global knowledge on critical dimensions of sustainable human development in order to reduce national poverty and human inequity. The GCF is designed to help UNDP play a lead role in the global fight against poverty and support UNDP in its transformation to a globally networked policy advice organisation focused on poverty reduction and sustainable human development.

2.2 Networking & Information Sharing

One of the goals of the SURF system is to foster knowledge networking, information-sharing and learning of UNDP staff in order to strengthen UNDP's capacity to be an effective international development agency.

2.3 Best Practices

The SURFs and the Knowledge Networks will increasingly offer opportunities to share information between country offices and network members on what works and what doesn't in development, and for UNDP staff to learn in the process.

2.4 Promoting national initiatives to empower the poor

UNDP advocates for these nationally-owned solutions and helps ensure their effectiveness. We sponsor innovative pilot projects; connect countries to global best practices and resources; promote the role of women in development; and bring governments, civil society and outside founders together to coordinate their efforts.

3. The UNESCO Initiative

www.unesco.org

3.1 Learning Without Frontiers: Constructing Open Learning Communities for Lifelong Learning

The Urgent Need for New Meanings

An increasingly complex and tumultuous world requires individuals and communities to be able to continually develop and utilise different kinds of knowledge frameworks, value systems, intelligence structures and skills in order to make sense of, adapt to and contribute to change in their social and physical environment in constructive and non-violent ways. Within this broader vision of human consciousness and participation, notions of lifelong and lifewide learning must take on new meanings. Learning can no longer be viewed as a ritual that one engages in during only the early part of one's life with an occasional refresher course to cater for incidental needs during adulthood. Nor can the value of learning be seen in one-dimensional terms as related only to obtaining a job.

As a trans disciplinary initiative, "Learning Without Frontiers" (LWF) represents UNESCO's proactive response to addressing the deep social and political problems that confront humanity as they relate to the role of learning in society. It views the processes of engaging in collaborative, multi channel and innovative learning as being critical for both the development of the individual and the building and linking of culturally diverse communities.

3.2 Education for Sustainable Development

www.unesco.org

The transdisciplinary project "Educating for a Sustainable Future" was launched in 1994 as the principal mechanism within UNESCO to follow-up the recommendations concerning education made by the major UN conferences of the 1990s and the conventions on biological diversity, climate change and desertification, and intended to mobilise, integrate and innovate within the Organisation across sectoral lines.

Ethical values, such as equity, are shaped through education, in the broadest sense of the term. Education is also essential in enabling people to use their ethical values to make informed and ethical choices. Fundamental social changes, such as those required to move towards sustainability, come about either because people sense an ethical imperative to change or because leaders have the political will to lead in that direction and sense that the people will follow them.

ESD's work is based on the three-pronged concept of transdisciplinarity, innovation and partnering and has established close links with the rest of UNESCO's work in education, as well as with other sectors of the Organisation and partners of UNESCO world-wide.

A Strategic Vision of Education for Sustainable Development

- Encouraging respect for ethics and values – the principal vector for promoting a viable future, as well as for fair and just societies.
- Promoting a true 'international democracy of knowledge' that will at the same time strengthen the richness and diversity of existing cultures.
- Fostering research, experimentation and innovation in ways that will fully contribute to the quest for a viable future.
- Bridging the gap between science and education for sustainable development.
- Reorienting the education system so that it takes account of today's complex realities – including globalization, interdisciplinary synergy and the possibilities created by new technologies.
- Strengthening regional-national cooperation efforts.

4. The Worldbank Initiative

www.worldbank.com

The World Bank Institute creates learning opportunities for countries, World Bank staff and clients, and people committed to poverty reduction and sustainable development. WBI's work program includes training, policy consultations, and the creation and support of knowledge networks related to international economic and social development.

Helping to bridge the developing world's digital divide

WBI uses the latest technology to connect the developing world with worldwide knowledge and expertise. Learning centres at universities, institutes, and other organisations throughout the developing world offer WBI courses, seminars, and "global dialogues" fostering the free exchange of information. These cost-effective electronic classrooms provide access to knowledge via satellite technology, video teleconferencing, and the Internet. One of WBI's partners is the African Virtual University, an independent non-profit organisation headquartered in Nairobi, Kenya. AVU gives people in 15 sub-Saharan African countries access to advanced scientific and technical information and knowledge, thereby promoting economic and social development.

Communities of Learning

WBI helps connect people who want to alleviate poverty and create a better world. Teleconferencing and the Internet link teachers and trainers, government officials, researchers, students, World Bank staff, and others. They share ideas and experiences to help solve problems and improve living standards.

5. The Media Lab Asia Initiative

www.medialabasia.org

Media Lab Asia is promoted as the world's largest academic research program dedicated to bringing the benefits of new technologies to everyone, with a special focus on meeting the grand challenges in learning, health, and economic development.

With core participation from MIT's renowned Media Laboratory, seed-funding from the Government of India, and participation of more than one dozen leading technical and business universities, Media Lab Asia will focus on technologies that respond to the needs of the vast number of individuals living in Asia, Africa, and Latin America.

The role of Media Lab Asia is to facilitate the invention, refinement, and dissemination of innovations that benefit the greatest number possible of the world's neediest people. Media Lab Asia will work with industry, NGOs, and governments, to bring these innovations to every village in Asia. The key to success for the Lab will be combining the creativity of entrepreneurs with the technical know-how of universities. As we work to cultivate sustainable and culturally appropriate solutions, particular challenges will include the need to operate in many different languages, as well as the need to support local culture and tradition.

Media Lab Asia consists of regional laboratories and participating grassroots communities, with headquarters in Mumbai, India, and a research program office within the MIT Media Laboratory. Each regional laboratory is formed around several core projects, each involving academic, industrial, and village community partners. The first regional laboratories are in Mumbai-Pune, Tamil Nadu, Kanpur-Lucknow, and New Delhi, each equipped with world-class research facilities and co-located at existing universities or corporate research centres. Regional laboratories are networked together by high-bandwidth connections to facilitate easy collaboration.

6. The National Innovation Foundation Initiative

www.nifindia.org

The Mission

To help India become an inventive and creative society and a global leader in sustainable technologies without social and economic handicaps affecting evolution and diffusion of green grassroots innovations.

Goals

- To help India become an inventive and creative society and a global leader in sustainable technologies.
- To ensure evolution and diffusion of green grassroots innovations in a time bound and mission oriented manner.
- To support scouting, spawning, sustaining and scaling up of grassroots green innovations and link innovation, enterprises and investments.
- To strengthen R&D linkages between excellence in formal and informal knowledge systems and create a Knowledge Network.
- To promote wider social awareness and possible commercial and non-commercial applications of innovations and incorporate the same in education curriculum, development programs and policies.

6.1 The Knowledge Network of Grassroots Green Innovators

A framework for creating an inventive ethic at grassroots level and forging links between excellence in formal and informal Science through the Honey Bee Network. The Honey Bee Network of grassroots innovators has proved that technological and institutional innovations developed by individuals and communities can provide a new way of thinking about (a) conservation of diversity, (b) generation of sustainable alternatives for natural resource management through self supporting viable economic and non-economic options, and (c) augmenting self reliant livelihood strategies. It is a model of poverty alleviation and conservation of natural resources which builds upon particular resources in which poor people are often rich i.e. their knowledge. In many cases, the insights learnt from local innovations can even extend the frontiers of modern science. Honey Bee Network was started ten years ago to correct asymmetry in power relationships between formal and informal sectors of science, technology and economic enterprises. The Honey Bee Network tries to a) provide a peer groups of farmers, artisans, scientists, academics across language, culture and regional boundaries to nurture, critique and encourage innovative experimentation; b) break the nexus between the regions of high biodiversity and high poverty endowed with poor public as well as private infrastructure; c)

provide access to information that can help improve productivity without increasing cost using other farmers' innovations.

6.2 The Sristi network

The enormous reserve of creativity and innovation at grassroots level has been the mainstay of our entire research program. How can innovations, in conserving biodiversity and other natural resources, along with the associated knowledge systems help in linking ethics, efficiency, excellence, equity, and environment ? SRISTI research aims at generating practical approaches of sustainable development through a major emphasis on linking innovations, investments and enterprise where possible. Non market options are also given special attention particularly to strengthen the propensity to experiment and innovate.

6.3 The Honey Bee Network

The name Honey Bee signifies a philosophy of discourse which is authentic, accountable and fair. Honey Bee does two things which many of us don't. Honey Bee collects pollen without impoverishing the flowers, and it connects flower to flower through pollination. The idea is that when we collect knowledge of people we should ensure that people don't become poorer after sharing their insights with us. Further, we should also connect one innovator with another through feed back, communication and networking in the local language. We have to share it with the providers of the knowledge what we did with the knowledge. If we generate consultancies or other sources of income by writing on people's knowledge, a fair share of this income must accrue to the providers in as explicit a manner as possible. Over the years we have documented innovations, traditional practices & collected outstanding examples of contemporary knowledge to form a 10,000 strong database (Honey Bee Database of Grassroots Innovations) part of which we have converted as multimedia database.

6.4 The Grassroot Innovation Augmentation Network (GIAN) project

GIAN aims at sustaining the spirit of innovation, encouraging experimentation and nurturing creativity at grassroots of knowledge rich economically poor people by converting their innovations into products. It makes a significant contribution in creating a knowledge network that can empower the innovators, recognise and augment contemporary innovations, and facilitate the diffusion of green grassroots innovations through commercial and non commercial public private and voluntary channels

7. The British Council Initiatives

www.britishcouncil.org

7.1 Knowledge and Learning Centre (KLC) project

The British Council is implementing a Knowledge and Learning Centre (KLC) project to create a global network of enhanced conferencing, learning and knowledge opportunities. Building on tried and tested methods of face to face interaction, this network will be a *combination of physical and virtual services*, with much of the initial investment going into technical platform, electronic content and service.

7.2 Building the information society

Promoting the UK as a valued partner in the creation of open and thriving information societies through

- * Physical and virtual access to UK information and knowledge resources through a world-wide network of 222 libraries and information centres and web sites
- * showcasing UK information and knowledge products and services through our physical and virtual networks and through trade fairs and exhibitions
- * creation and participation in local, regional and global knowledge networks to ensure that UK ideas and expertise are widely shared with our overseas audiences
- * training, consultancies, workshops and seminars in the information and knowledge sector.

In all areas of activity the Council aims to work in partnership with UK and international library and information society organisations and individuals.

7.3 GKP Strategy 2005

Vision

GKP has a vision of a world of equal opportunities where all people are able to have access to and use knowledge and information to improve their lives.

Mission

- * The Global Knowledge Partnership is an evolving network of public, private and not for profit organizations.
- * We aim to promote broad access to – and effective use of – knowledge and information as tools of equitable sustainable development.
- * We share information, experiences and resources to realize the potential of information and communication technologies to improve lives, reduce poverty and empower people.

8. EU: International Cooperation with Third Countries

8.1 ASIA ICT Programme

Asia ICT is one of the series of EU initiatives under its International cooperation with third countries. It promotes the EU network model of R &D to stimulate the societal applications of ICT in the digital knowledge-based society. This initiative covers areas of application such as the wider social and economic advancement in the Society context; the stimulation of the paradigm shift from the teaching to learning in the education context; the potential to offer a multitude of benefits arising from ICT supported health care and medicine in the Health context; the role of Information technology in facilitating the survival and sustainability of agriculture and farmers in the interdependence of world markets through globalisation, and emergence of new markets in Asia and changing government policies to include assistance and, addressing the need to increase production through the transfer of the benefits of technological innovation. This wider societal context of the ICT initiative, also covering area of e-commerce, transport, tourism and I-manufacturing, provides an opportunity to stimulate R&D through networking of universities, enterprises and knowledge centres in socio-economic and entrepreneurial innovations.

Areas of Activity

SOCIETY: CONTEXT

The application of IT&C in this area of activity contributes to the creation of 'The Networking Society' whereby all citizens - as consumers, workers, and members of enterprise - can actively participate in our increasingly information-based society.

EDUCATION: CONTEXT

The application of IT&C in education has the capacity to greatly contribute to the empowerment of the individual. IT&C has facilitated a beneficial paradigm shift, to focus currently on *learning*

rather than *teaching*. Furthermore, a highly educated, flexible workforce is one of the key assets of a society and will contribute to its competitiveness in the global knowledge economy.

HEALTH: CONTEXT

IT&C, particularly the Internet and related technologies, has the potential to offer a multitude of benefits to the field of health and the evolution of tele-medicine.

AGRICULTURE: CONTEXT

Agriculture is one of the most important economic sectors to the majority of Asian countries participating in the Programme. There is a need for all stakeholders to join in addressing the need to increase production through the transfer of the benefits of technological innovation. This includes increased collaboration in research and improved co-operation between public and private sectors in the developed and developing world. International synchronisation of agricultural regulatory policy is necessary to allow for the adoption of new technologies. The management, ease of access of information and its use in decision-making will have a major impact on the continued existence of agricultural industries in Asia.

TRANSPORT: CONTEXT

The application of IT&C in the Transport area has the potential to offer substantial benefits not only to the Europe - Asia interchange of goods and citizens, but also to the inter -country and inter-city relations inside Asia, allowing also the Asian countryside and the large cities in Asia to take advantages to a better extend in this crucial economic and social development.

TOURISM: CONTEXT

The economies of many countries in Asia are relying increasingly on the tourism and leisure industries for employment and growth opportunities. It is important to recognise that smaller and more localised enterprises will benefit from the application of IT&C. Such businesses offer the advantage of close cultural intimacy to travellers and tourism benefits will filter down to more remote localities, thus spreading the distribution of wealth. An additional benefit from this development is the exposure of remote populations to external cultural influences.

E-COMMERCE: CONTEXT

The current winning strategy for organisations of every size is to make it convenient for their customers to do business with them. The relatively recent emergence of the Internet gives support for that strategy in generating electronic commerce.

I-MANUFACTURING: CONTEXT

Many countries in Asia have a substantial manufacturing base and some are already applying intelligent manufacturing. This field is expanding rapidly, particularly in the area of remote control. There is the potential to accelerate the recent trend in the organisation of industries, namely, 'vertical disintegration', i.e. traditional firms focus more and more on R&D and marketing while manufacturing is provided by external suppliers.

ANNEX II

1. International Cooperation : Confirming the International Role of community Research

International co-operation represents an important dimension of the Framework Programme with participation of researchers, teams and institutions from third countries in projects within the different thematic priority fields, related to issues arising at world level and being subjects of international efforts

International cooperation in the field of research and technological development (RTD) is pursued under the 5th Framework Programme, through two complementary routes:

* A dedicated cooperation programme «Confirming the international role of Community research», which focuses on specific RTD activities relevant to certain third countries or regions and not addressed by other programmes of the 5th Framework Programme;

1.1 Training of Researchers

A fellowship scheme allows a limited number of young doctoral level researchers from developing countries, including Mediterranean and emerging economy countries, to work in European laboratories on projects of the framework programme.

1.2. International Cooperation Pursued Through The Other Framework Programme Activities

The second form of international RTD concerns participation of third country entities and international organisations in the other specific programmes of the framework programme arrangements for intellectual property rights.

1.3 Bursaries for young researchers from Developing Countries

The **objective** is to sow the seeds of future collaboration between Europe and the countries concerned by setting up a system of bursaries, complementary to Member States schemes, to give young researchers from Developing Countries, (including Mediterranean Partner Countries and Emerging Economies) the opportunity of collaborating within institutes in the Community (or in Associated States) on projects of the specific programmes of the 5th Framework Programme.

The **approach** is to grant bursaries for a period of up to 6 months, for training (i.e. learning a scientific technique) or for work on a particular experiment (or study) which cannot be performed in the home institute of the young researcher.

Participation of young researchers from Developing Countries in projects of the 5th Framework Programme leading to the construction and strengthening of links between these countries and the Community.

1.4 Joint Research Centre (JRC) Research fellowships

In order to increase and reinforce the European Commission's scientific capacity in all of its areas of involvement in the Research and Technological Development Framework Programmes, and to encourage young scientists to enhance their experience in an international, multicultural and multidisciplinary environment.

2. The ASIA-LINK Programme

europaaid-asia-link@cec.eu.int

The Asia-Link Programme is a new initiative by the European Commission to promote regional and multilateral networking between higher education institutions in EU Member States and South Asia, South-East Asia and China. The programme aims to promote the creation of new partnerships and new sustainable links between European and Asian higher education institutions, and to reinforce existing partnerships.

The objective of the Asia-Link programme is to promote regional and multilateral networking between higher education institutions in Europe, South and South East Asia and China.

3. ASEAN-EU UNIVERSITY NETWORK PROGRAMME (AUNP)

A Co-operation programme for EU and ASEAN higher education institutions

The ASEAN-EU University Network Programme (AUNP) builds on the long-standing, high-level political dialogue between the European Union (EU) and the Association of Southeast Asian Nations (ASEAN). The objective of the programme is to improve mutual understanding between the two regions, and to develop co-operation through linkages in the field of higher education.

The AUN seeks to strengthen the existing network of co-operation among higher education institutions in ASEAN by promoting collaborative studies and research programmes on the priority areas identified by ASEAN.

4. The Human Potential Programme: a model for future EU-India Networking

Rationale

The world is increasingly based on knowledge. The Community's prime asset in this area is the quality of its researchers, engineers and technicians. The aim is to preserve and help develop this knowledge potential through greater support for the training and mobility of researchers and by enhancing access to research infrastructures.

The Community also has a solid tradition of research in social and economic science and the humanities, which needs to be mobilised to identify economic and social trends and requirements, both current and future, in order to contribute to the Community's competitiveness and quality of life of its citizens.

4.1 General Objectives

The general objectives of this programme, to be realised in concert with related activities elsewhere in the Framework Programme, are centred on two main areas of activity, to improve the human research potential and to strengthen the socio-economic knowledge base. To this end, actions will be undertaken:

- * to develop the Community's human research potential, making special efforts to ensure equality of access and a better balance between men and women, notably through the training and mobility of researchers so as to contribute, inter alia, to efforts for creating new jobs;
- * to help make the Community an attractive location for researchers and to promote European research in the international arena and to promote a European scientific and technological culture;
- * to strengthen, through a specific key action, the socio-economic knowledge base for a better understanding of key problems facing European society;
- * to help develop scientific and technological policies and other Community policies.

4.2 Marie Curie Host Fellowships

Young researchers can apply for research positions under the following schemes:

- * Marie Curie Training Sites offer opportunities for young researchers pursuing doctoral studies to benefit from short stays in internationally recognised groups.
- * Industry Host Fellowships allow young postgraduate and post-doctoral researchers to receive training in an industrial or commercial environment.
- * Development Host Fellowships seek young researchers with experience capable of transferring knowledge and technology to institutions in less-favoured regions.

4.3 Research Training Networks

The primary objective of Research Training Networks is to promote training-through-research, especially of young researchers, both pre- and post-doctoral level, within the frame of high quality international collaborative research projects, including those in emerging fields of research.

5. Commonwealth Scholarships/Fellowships

A fellowship is available in any academic subject (including Medicine and Dentistry). Fellowships are primarily intended for younger established teachers (not for the senior members of the department) to enhance their teaching and/or research experience, or in the case of Medicine and Dentistry, clinical skills relevant to what they're going to study at the institution they choose. Commonwealth Fellowships are not available for higher degrees.

These scholarships are awarded for studies leading to either

- (a) one year Master's or equivalent degree or one-year of clinical training in Medicine or Dentistry
- or (b) a three year doctoral or equivalent degree. Candidates who have already completed PhD or about to complete are unlikely to be considered.

6. Ford Foundation International Fellowships Program (IFP)

The Ford Foundation International Fellowships Program (IFP) provides opportunities for advanced study to exceptional individuals who will use this education to become leaders in their respective fields, furthering development in their own countries and greater economic and social justice worldwide. To ensure that Fellows are drawn from diverse backgrounds, IFP actively seeks candidates from social groups and communities that lack systematic access to higher education.

Ford fellowship recipients have become leaders in institutions around the world and have helped build global knowledge in fields ranging across the natural and social sciences as well as the humanities and arts. IFP draws on this tradition and underscores the Foundation's belief that education enables people to improve their own lives as well as to assist others in the common pursuit of more equitable and just societies.

The International Fellowships Program provides support for up to three years of formal graduate-level study leading to a masters or doctoral degree. Fellows are chosen on the basis of their leadership potential and commitment to community or national service, as well as for academic excellence. Fellows may enroll in masters or doctoral programs and may pursue any academic discipline or field of study that is consistent with the interests and goals of the Ford Foundation. The Foundation currently works in fifteen fields to strengthen democratic values, reduce poverty and injustice, promote international cooperation, and advance human achievement.