今日人类学民族学论丛 Anthropology and Ethnology Today Series 国际人类学民族学联合会第十六届大会文集 Book Series of the 16th World Congress of IUAES 黄忠彩 总编 Editor-in-Chief Huang Zhongcai

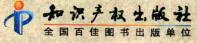
# 应用人类学: 发展与文化多样性

**Applied Anthropology: Development and Cultural Diversity** 

[印]马图拉◎主编

Edited by P. R. G. Mathur





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#### **Preface**

China won the right to host the 16th IUAES World Congress in July, 2003. After six years of preparation, the Congress will be held in Kunming, China during July 27-31, 2009.

The International Union of Anthropological and Ethnological Sciences (IUAES) was established on August 23, 1948, when it merged, in fact, with the International Congress of Anthropological and Ethnological Sciences (ICAES), which was founded in 1934. The latter was the product of various Congresses of Anthropological Sciences, starting in 1865.

The IUAES is one of the member organizations of the International Social Science Council (ISSC) and also of the International Council for Philosophy and Humanistic Studies (ICPHS). The IUAES is also a member of the International Council of Scientific Unions (ICSU). Its aim is to enhance exchange and communication among scholars of all regions of the world, in a collective effort to expand human knowledge. In this way, it hopes to contribute to a better understanding of human society, and to a sustainable future based on harmony between nature and culture. The IUAES once noted a draft statement on the future of world anthropology in "Current Anthropology" (1979): "The scope of anthropology in terms of areas of human interest includes such critical issues of the contemporary world as problems of environmental management, pressure for the progressive reduction of disparities and the restructuring of the world order, the future of the nation-state, ethnic pluralism and the future of national society, and the harmonization of the roles and functions of institutions with the basic and derived biological and psychic drives of man." The IUAES itself consists of national and institutional organizations in more than 50 countries in all parts of the world, and also includes some hundreds of individual members. The research effort and involvement of the IUAES is principally arranged by its scientific commissions, of which, currently, there are twenty-seven, and each of which concentrates on some areas of anthropological interest. They included ethnic relations, aging and the aged, women, children, youth, migration, epidemiology and Aids, tourism, primatology, linguistics, and so on.

The theme of the 16th IUAES World Congress in Kunming, China is "Humanity, Development, and Cultural Diversity". The Anthropologists and Ethnologists around the world will present over 4000 papers, which covered 33 sub-disciplines or research fields as

follows: Aging and the Aged Studies, Aids, Archaeological Anthropology, Children, Youth and Childhood Studies, Communication Anthropology, Development and Economic Anthropology, Educational Anthropology, Enterprise Anthropology, Ecological/Environmental Anthropology, Ethnic Culture Studies, Ethnic Relations and Ethnic Identities, Food and Nutrition Anthropology, Gender and Woman Studies, Globalization Anthropology, Historical Anthropology, Human Ecology, Human Rights Studies, Indigenous Knowledge and Sustainable Development Studies, Legal Anthropology and Legal Pluralism, Linguistic Anthropology, Medical Anthropology and Epidemiology, Migration Anthropology, Museum and Cultural Heritage, Nomadic Peoples Studies, Physical Anthropology and Molecular Anthropology, Psycho-anthropology, Religious Studies, Sport Anthropology, Theoretical Anthropology, Tourism Anthropology, Urban Anthropology, Urgent Anthropological Research, and Yunnan Studies.

As the organizer of the 16th IUAES World Congress, the Chinese Union of Anthropological and Ethnological Sciences (CUAES) decided to edit and publish "Anthropology and Ethnology Today Series"—the paper collection series of the above sub-disciplines or research fields, for example, Physical Anthropology, Molecular Anthropology, Migration Anthropology, Museum and Cultural Heritage, Nomadic Peoples Studies, Linguistic Anthropology, Medical Anthropology, and Ethnic Culture Studies. We hope that the scholars from different parts of the world can share with all the achievements in the book series of this congress.

Zhou Mingfu, Executive Vice-president Chinese Union of Anthropological and Ethnological Sciences

Huang Zhongcai, Secretary-general Chinese Union of Anthropological and Ethnological Sciences July 14, 2009

### Introduction\*

Malinowski (1938) declared emphatically that Anthropology must become an applied science. In this connection, Prof. Fei (1980) has observed "applied anthropology, as I understand, it is a science concerned with the transformation of human society through the knowledge of social scientist". And he has also said that "genuine applied anthropology must be a science serving the interest of the masses. This is what is meant by peoples' anthropology. And it is the duty of anthropologists whose object is to study human society and culture to meet the imperative needs of the people".

Margaret Mead (1978) stressed the need for ethical considerations which govern and guide the work of Applied anthropologists in particular and those of anthropologists in general. Applied anthropologists and researchers can play a vital role as interventionists and practitioners and the results of their research can be expected to have identifiable consequences in the lives of human societies. As researchers, anthropologists become practitioners who need practical ethics, just as the medico-legal profession needs professional ethics. Findings of anthropologists in matters which have immediate political, social or economic repercussions may differ very sharply from accepted government policies. Mead points out that "in some situations, Government may seek the services of anthropologists, while in others they might expel them from the country or even imprison them for inappropriate partnership or interference in the country's internal affairs." (Mead, 1978)

The formulation of development programmes all over the world in general, and the third world countries in particular, was monopolized by economists, economic planners and economic administrators from the very beginning. This seemed justified in the beginning, because the basic aim was to eradicate poverty. Later on planners and administrators came to realize that previous models lacked some critical elements, namely knowledge of the culture and society of the people for whom development plans were formulated and that these lacunae could be effectively filled by anthropological expertise. Recently the role of anthropologists is increasingly appreciated for their holistic view of the society, and their understanding of the culture and system of social relations, especially in planning the

<sup>\*</sup> I would like to record my indebtedness to Prof. Edward Sankowski, University of Oklahoma, for his comments on the Introduction.

administration of development programmes for weaker sections, with particular reference to Scheduled Tribes in India.

Writing on the role of planning, Clyde Kluckhohn observes: "Anthropologists are being more and more drawn into the planning and administering of various types of programmes. Sometimes their role is merely that of advising or of doing background research, but an increasing number are themselves becoming administrators. Applied anthropology has now moved beyond the phase where the primary task was that of inculcating respect for an understanding of native customs. The problem is now seen as two-sided. The content and structure of the culture of the administered group must still be analyzed. The practical anthropologist must also have a systematic understanding of the special subcultures of the policy-makers, the supervisory administrators, and the field operators." (Clyde Kluckhohn, 1965: 160-161)

As regards the role of an applied anthropologist on the planning and implementation of projects, UNESCO (1993) says that "the beneficiary population's participation in the project from planning to implementation and evaluation. In itself, participation is the best and perhaps the only way of taking the cultural dimension of development into account". (P:126)

#### TWO PANELS AT THE 16th IUAES WORLD CONGRESS, KUNMING, CHINA

Professor P.R.G. Mathur organized two Panels, viz., ① Applied Anthropology, Development and Cultural Diversity, and ② Humanity, Development and Cultural Diversity among the Fisherfolk, at the 16th IUAES World Congress, held on 27—31 July, 2009 at Kunming, China.

There were twenty to twenty-five participants in each section, from across the globe, including world famous anthropologists and interdisciplinary researchers such as Professor Joan Mencher, Professor Edward Sankowski, Professor Eberhard H. Weber, and Professor Gideon Kressel. Each paper was critically evaluated and vigorously discussed by the participants.

The Panel Applied Anthropology, Development and Cultural Diversity was divided into four sections, viz.:

- A. Towards Peoples' Anthropology was chaired by Shalina Mehta, Professor of Anthropology, Panjab University, Chandigarh, India.
- B. Development of Applied Anthropology: Potential and Prospects for the 21st Century was chaired by Edward Sankowski, Professor of College of Arts and Sciences, University of Oklahoma, USA.
- C. Applied Anthropology, Cultural Ecology, Environment and Bio-diversity was chaired by Palpu Pushpangadan, Amity Institute for Herbal and Biotech Products

Development, Kerala, India.

D. Ethnicity, Public Policy and Applied Anthropologists was chaired by P.K. Sivanandan, Chairman, Commission on Scheduled Castes and Scheduled Tribes, Government of Kerala, India.

The Panel Humanity, Development and Cultural Diversity among the Fisherfolk had two sections, viz.:

- A. Maritime Anthropology: Relevance of Empirical / Action Research was chaired by Vineetha Menon, Professor of Anthropology, Kannur University, Kerala, India.
- B. Ecology, Economy, Culture and Survival Strategies / Technologies was chaired by Eberhard H. Weber, Division of Geography, School of Islands and Oceans, Faculty of Science, Technology and Environment, the University of the South Pacific, Suva, Fiji Islands.

The Panel on Applied Anthropology, Development and Cultural Diversity was scheduled for 27th, 28th and 29th July, 2009 from 15:00 to 19:00.

Introducing the Panel Applied Anthropology, Development and Cultural Diversity, P.R.G. Mathur argued that "genuine applied anthropology must be a science serving the interest of the masses. This is what is meant by people's anthropology. And it is the duty of anthropologists whose object is to study human society and culture to meet the imperative needs of the people." (Fei, 1980)

The first Section, titled Towards Peoples' Anthropology, chaired by Shalina Mehta, Panjab University, was held on 27th July, 2009 from 15:00 to 19:00. She said that "Anthropology has come of age from its obsession with adventure, exotic, origin and it has become a part of 'pure science' and also Applied and Action Anthropology". She said further that globalization has unleashed forces that are posing conflicting challenges to society and research. Dramatic developments in the field of technology have created new sites for interaction. Anthropologists are steadily redefining their positions and research agendas.

The scholars who presented papers in this section include the following:

Antonia Bertocchi, who emphasized in her paper ("Urgent Tutelage...") that indigenous people, particularly food gatherers and hunters, are subject to destruction. But they have been able to develop harmonious and eco-friendly social relationships. This is evident from the fact that the surviving indigenous peoples are desperately defending their environment from the brutalizing assault of the world, i.e., globalization and liberalization. They are being crazily led to extinction by the western world. Therefore they must be defended as precious and irreplaceable for the safety of the human species. This should be recognized by UNESCO, as they are the bearers of a traditional cultural heritage of human

life. She argued that the biological and cultural variety of indigenous communities should function as a subject of urgent tutelage by a New Anthropology, the Anthropology of Environment, Ecology and Culture.

Vineetha Menon, in her paper ("The Problem of 'Knowledge' in Applied Anthropology") she said that "in a context of globalization, applied anthropology has an unprecedented responsibility to critically look at the practices of its practitioners as well as to reflect upon our own positions with regard to people and anthropological concepts like "cultural relativism" and "holism", what these mean to anthropology as a discipline and its claims to meaningful interventions in development". She also argued that "we need to consider what are the skills and specific orientations that make an anthropologist better suited for that type of development intervention than local activists. It is an anthropologist's holism and sensitivity to cultural relativism that foregrounds an anthropologist's claim to disciplinary advantages in development planning and action".

Edward Sankowski chaired the section, Development of Applied Anthropology: Potential and Prospects for the 21st Century.

He presented a paper in this section ("Global and National Dimensions of Universities, Public Health, and Economic Development"). He argued that universities are increasingly global organizations with obligations about improving public health, and that their role in economic development must be understood in part by reference to those obligations. Anthropology and other academic disciplines such as the other social sciences, philosophy, and biomedical sciences must collaborate, and universities must engage in outreach into the non-academic world to fulfill their function. A crucial point in his presentation was to argue that anthropology and other social sciences need an improved knowledge of the nature of value judgments (and their global and multi-cultural aspects) to do their work well, and that philosophy in conjunction with empirical work can be a valuable resource for this.

Comments from the audience included the observation that codes of ethics for anthropologists and other scientists seemed to be important, at least as one feature of the ethics of science, and that respect for persons should be among the bases of such codes.

Sidney Greenfield and Maria de Alcantara describe the tragic case of adolescent suicides in the Aldea de Dourados in Brazil, and "Indian" Reservation. Through a long history of oppression starting from the Portuguese colonialists, the rights of the tribal people were curtailed; the land was grabbed by the State, and settled by affluent "Euro-Brazilians" who destroyed the bio-diversity to turn the territory into "rich" farmland. One of the tribal communities, the Terena, had learned Protuguese and took up employment as farm labour and domestic servants. They also used their advantages to grab the land in the occupation of the other tribes. The cultural past of the communities was cruelly

destroyed. They had no assured means of livelihood, nor found any meaning in life. Alcoholism, abuse of women, violence, and desperation resulted in increasing rates of suicide, especially of adolescents. An ameliorative program aimed at helping them to gain mental strength gave "the natives their voice, and the experts listened to them with respect. But there was no intervention, and nothing changed. Suicide rates on the aldea did not go down in succeeding years, nor did the amount of violence".

Aleya Hassan Hussien presented a paper ("Diversity and Sustainable Development in Egyptian Oases"). Her commentary and visual materials vividly depicted and analyzed these oases, which depend on underground water. The oases are culturally diverse communities with unique ecological, physical, and geographical conditions. Cultural development of each such community must draw on an understanding of its cultural heritage. Thus the application of anthropology for the sake of cultural development presupposes an understanding of the history of oases, and current realities in oases. The presentation focused on demographics, the effects of ecological conditions on culture, and the relevance of sustainable development and cultural diversity to such oases. The presentation included a valuable discussion of museology.

Comments from the audience included the observation that building in the oases is one interesting and significant aspect of the cultures of oases. The integration of written and spoken commentary with visual materials was praised by the audience, as was the account of a museum about oases.

V.R. Rao and M. Sreenathan jointly presented a paper ("Andamanese Mythical Signatures Confirm a Link of Gondwana Mythology in Lauresian Cluster"). This was a very innovative and interesting discussion of use of methods from genetic science in combination with folklore analysis of stories, aiming to shed light on African origins, and migration from Africa to India to Europe and back to India. This exceptionally stimulating paper generated a great deal of discussion.

Comments from the audience included the observation that the researchers' methodology held the promise of advancing understanding of the topics studied beyond what was possible with prior methods such as morphological analysis of fossils. One possible implication is that human evolution occurred more rapidly than thought on the basis of earlier methods.

Palpu Pushpangadan chaired a section, Applied Anthropology, Cultural Ecology, Environment and Bio-diversity. Presenting a paper ("Kani Model of Access and Benefit Sharing..."), Pushpangadan said that the Kani Model (KABS) is the first ever benefit sharing model that implemented in letter and spirit the directives on Access and Benefit Sharing (ABS) stipulated in UN-CBD. This model relates to the development of a

scientifically validated and standardized herbal drug, "Jeevani", by him and Rajasekharan based on a lead received from a forest dwelling semi-nomadic Kani tribe (Kanikkaran, Kanikkar Scheduled Tribe of Kerala). Dr. Pushpangadan noted that he had received a UN-Equator initiative award under the individual category in 2002. KABS, he says, offered several lessons to be learned at various levels. It also manifested the growing inter-play between tribal collective rights and the monopolistic rights of the WTO regime. The KABS model demonstrates that the traditional communities can be empowered to preserve/protect their traditional knowledge and at the same time enabled to assert their rights while taking their resources and knowledge into the market regime of the modern world.

Anwar Hussain presented a paper—The Jatka Conservation Program and Its Implications for the Riverbank Fishers in Bangladesh: A Case Study.

Zeng Xianjun and Luo Kanglong presented a paper—Study of Cultural Ecological Balancing and Human Security Issues.

Tan Weihua and Yang Tingshuo presented a paper—Ethnic Multicultural Coexistence Is the Fundamental Premise of Steady Renewal of Biodiversity.

Tan Weihua and Yang Tingshuo raise important issues of the inter relationship between ethno-cultural diversity and bio-diversity. They call it a "Coupling relationship" in the sense that they are mutually reinforcing. This is indeed of deep significance to multi-cultural polities in the context of a globalizing uniformity. Theoretically, it raises the questions of "co-evolution" of genetic features associated with human cultural diversity, and the associated biotic influences on the ambient diversity of other life forms. There is an inherent caution implied in such analyses: in the search of a globalized exploitation of resources, such as the accelerated mining of exceptionally rich iron ore from a forested region predominantly inhabited by tribal groups, as in a State like Orissa in India, the State, under the dictates of Central Policy, violates its own laws regarding the Conservation of Forests, Extension of Panchayati Raj to Scheduled Areas, and the Rights of Forest-dwelling Scheduled Tribes. High profile rhetoric is unleashed by top national political leadership to justify such encroachment over the Commons while the mass media report "State-sponsored Violence" against the protesting local communities. In the meantime, heavy machinery moves in, destroying forests, altering landforms, and obliterating bio-diversity. The deliberate destruction of bio-diversity closely parallels the pauperization of the local culturally diverse communities. Rhetoric portrays it as "bringing them into the Main-stream of National Life", though it be as flotsam and jetsam!

The modern State seems to learn nothing from its own experience, and still less so from the experience of others. P. Venkata Rao describes the "Emerging Role of Anthropology in Tribal Development: the Post-Liberalization Scenario in Andhra Pradesh"

(India). The beginning of Liberalization attracted major industrial enterprises to the valuable mineral resources in the traditional tribal habitats that had been specially protected, even by the British Imperialists. The State Government issued orders for acquiring land on behalf of a Dubai-based company, despite the fact the Land Transfer Regulation, a law devised by the State Government themselves, prohibited the allotment of land in "Scheduled Areas" to non-tribals. The Supreme Court struck down the State Government's orders, but the latter circumvented the judgment by allowing a private sector company to establish a Rs. 9500 Crore (=US \$ 900 Million) bauxite-mining project, jointly with a State-owned Corporation! This violated the provisions of another Act (Panchayati Raj Extension to Scheduled Areas Act = "PESA"), according to which mining operations in Scheduled Areas can be undertaken only after the informed written consent of the local bodies in the area. The company is expected to spend 0.05% of its sales revenue on tribal welfare and developing infrastructure in the area which they would anyway have been compelled to do in its own interests.

Rao also describes how an all-powerful bureaucratic-entrepreneurial nexus is distorting or even violating the Rule of Law. Under "PESA", the local bodies controls the forest resources, but the Forest Department hold on to its monopoly over the most profitable items of produce like "Tendu Leaves". To blunt opposition to the draconian provisions of the Forest Conservation Act 1980, the Government formed Joint Forest Management Committees later renamed as Vana Samrakshana Samithis. But no legal rights have been conferred on them, the Forest Department merely uses them as extended labour pools. Large areas of Forest have been reserved as wild life sanctuaries, but they are now envisaged as sources of "Tourism" revenues. Government Corporations join with private enterpirses to capitalize on these assets of the Commons. "All departments except the tribal welfare department are part of the State Tourism Promotion Board, including representatives of the Private Sector" (emphasis supplied).

The echoes of Rao's paper are menacing. These features are by no means limited to Andhra Pradesh, but are "global" throughout India, every other State having tribal populations residing in forests facing the same threats. The pressure of the Central Government compounds the self-interests of Corporate investors and the "vote-bank" calculations of the local populations. The tragic casualties will be the helpless tribal people on whose behalf so much has been promised by the Constitution, and the Bio-diversity of India that will be sacrificed at the altars of industrialization, globalization and modernization.

P.K. Sivanandan chaired the section titled Ethnicity, Public Policy and Applied Anthropologists under the panel Applied Anthropology, Development and Cultural

Diversity. In his paper "Empowerment of Tribal Women and Sustainable Development in Kerala, South India", he asserts that "normal" methods of planning and implementation of development programmes for socially and economically backward societies in developing countries had poor "trickle down" effects. Planning by the ruling class did not take into account the real needs of these people. The meagre resources deployed seldom address their most pressing problems such as quality education, housing, health and social needs adequate for their growth and development. He indicated that when an externally aided project for the development of wasteland was implemented (assisted by the Japan Bank of International Co-operation), the governments of Kerala and India decided to select the most degraded tribal area in Kerala (Attappady) and adopted a participatory approach in its planning and implementation. This resulted in empowerment, especially of tribal women, and sustainable development. The study clearly indicates the role that anthropologists and other social scientists can play in understanding cultural diversity and the developmental needs of the poor tribal communities, in active planning and implementation of developmental programmes in ecologically fragile areas such as this.

Gideon M. Kressel presented a paper—Transference of Knowledge to Facilitate Life Under Desert Conditions: Results of Research Obtained in BGU to Desert Populations Elsewhere.

In a paper ("Traditional Ecological Knowledge, Biodiversity and Sustainable Development"), P.R.G. Mathur highlighted tribal communities which possess a rich knowledge about ecological and biological balance. They maintain a symbiotic relationship with nature. Traditional Ecological Knowledge (TEK) transmitted from one generation to another is fast eroding with the advent of processes of market economies penetrating deep into tribal heartland. There is no denying the fact that the tribal communities have been the creators and custodian of traditional ecological knowledge. Living in harmony with nature, they still preserve vast and valuable biodiversity. Their traditional ecological knowledge has to be developed in part for the recognition and protection of their Intellectual Property Rights (IPR). Typically, many of the Convention(s) of Bio-Diversity (CBD) are inappropriate and inadequate for safeguarding the rights of tribal peoples.

Shaik Abdul Azeez Saheb presented a paper ("Development and Cultural Diversity among the Muslims of Andhra Pradesh"). He argued that there is clear social stratification among Muslims in India. The foreign immigrants called the Asharafs and the local converts from the lower strata of Hindu society are designated as the Ajlafs. The former are further segmented into four endogamous groups known as Syed, Shaik, Moghal and Pathan. The last is divided into several small endogamous groups known as Labbai, Khureshi, Mehdi etc., He maintained the view that Indian Muslims have caste-like groups. He argued that the

Urdu speaking Syed of Asharafs can be said to be the descendants of the Prophet.

Sasikumar in his paper ("Applied Anthropology and Jurisprudence") argued that applied anthropology has played an important role in protecting and defending the constitutional safeguards earmarked for the Scheduled Castes and Scheduled Tribes in India, with the intervention of the judiciaries. He also emphasized that Articles 341 and 342 of the constitution and the Act 11 of 1996 of the State Government in Kerala have protected the constitutional safeguards of the SC and ST. He concluded his paper by arguing that applied anthropological studies introduced in Kerala have resulted in preventing the infiltration of ineligible communities into the folds of SC and ST.

All other papers included in this volume are:

#### PART II

- 1. Family Structure, Cultural Diversity and Economic Behaviours of the 80s Generation Born in City of China—Bai Yun
- 2. Reducing Adolescent Suicides on the Alea De Dourados, Brazil: A Proposed Psycho—Anthropological Intervention—Sidney M. Greenfield

#### PART IV

- 1. Interface of Ecology and Culture: Indigenous Perceptions of Environment—B.L.Malla
  - 2. Traditional Craft and Cultural Revival—Ye Ji-hong

The Panel on Humanity, Development and Cultural Diversity among the Fisherfolk was scheduled for July 31.

Presenting the panel paper titled "Humanity, Development and Cultural Diversity among the Fisherfolk", P.R.G. Mathur depicted how the marine environment exerts causal force on fisherfolk and their thoughts, feelings and actions. The investigation looked at their economy, technology and the institutions related to the marine eco-system, as well as their cultural heritage.

The section on Maritime Anthropology: Relevance of Empirical / Action Research under the Panel Humanity, Development and Cultural Diversity among the Fisherfolk was chaired by Vineetha Menon.

Dr. P.R.G. Mathur, in his paper "Indigenous Knowledge and Sustainable Development among the Fishing Communities of Kerala, South India", aimed to show how the marine environment exerts causal force on its fisherfolk and their thoughts, feelings and actions. He showed how the economy and the technology of fishing shape institutions or how these are related to marine eco-systems, by examining the similarities and differences in ecological adaptation and modern technological innovations as well as economic development among three religious groups, viz., Mappila, Latin Christians,

and Hindu fisherfolk.

Vijaya Khader's paper contended that much of India's national food security rests on the shoulders of its fisherwomen and comprehensive care of these women is a necessity if India's fisheries sector is to be satisfactorily sustained and the fisher women empowered, both socially and economically. This, she argued, can only be done through education about nutrition, health, sanitation, and child care, and training on current technologies and best practices techniques. She based her argument on a study carried out in the coastal areas of four states, Andhra Pradesh, Karnataka, Kerala and Tamilnadu. The contributions of the fisherwomen, Khader suggests, penetrate every aspect of post-harvest handling, preservation, processing and marketing of seafood products and provide an integral link between producers and consumers, but increased competition, declining resources and difficult working conditions make their work challenging.

MC Arunkumar's paper, "Baffling Development Stratagem: the Case of Fishing Communities of Loktak Lake" highlighted the problems faced by the fishing community of Loktak Lake, the largest freshwater lake in Northeast India, due to developmental works. Development works have been disturbing the lake ecology very seriously and have put the fishing community into a troubled life. The impact of the Loktak Hydro-electric project on the ecology and the fishing community is detailed vividly by Arunkumar.

Together, the papers contributed to advance Maritime Anthropology and our knowledge of the inter-relationships of ecology and the lives of fishing communities.

The following are further papers presented by various scholars.

B.K. Ravindranath and S. Arun Das (India): "Geo-Anthropological Research on Human Development and Cultural Diversity of the Harikantra Community of Southern India."

K.R.Priya (India): "The Changing Status of Fisherwomen in India."

The section on Ecology, Economy, Culture and Survival Strategies / Technologies classified, under the panel Humanity, Development and Cultural Diversity among the Fisherfolk, was chaired by Eberhard H. Weber. The panel started with an introduction by Professor P.R.G. Mathur on the tradition and relevance of the study of the economic and ecological background of marine fishing, the (material) culture of the fishermen involved as well as survival strategies in times of stress, pressure and risk. Referring to natural hazards (and here in particular to the tsunami of 2004) Mathur highlighted the great relevance Maritime Anthropology has in present-time social science.

The first paper for the afternoon was on "Factors Contributing to the Integration and Survival of a Traditional Fishing Community in Modern Bangladesh" by Associate Professor Anwar Hussain (from the Department of Sociology of the National University, Gazipur, Bangladesh). The author stressed that the fishing communities of the past, and their cohesive social organization and cultural features have lost much of their importance. In Bangladesh even the numbers of traditional fishermen have gone down. However there are still quite a number of people following the profession of fishermen, often on a subsistence basis, as they are unable to find alternative employment. The fishing community under study had been a well established community in Bangladesh. Belonging to a low Hindu caste they are disadvantaged in several ways. E.g., they live in a country where the majority of the population belongs to a different religion, and amongst their own religion they are at a very low level of social stratification. Changes, positive and negative, in Bangladesh's overall society and economy have undermined the traditional fishing community. Due to many factors, members of this community are not able to benefit from the positive aspects of modernization processes. It was suggested that they should aim at greater inter-group solidarity and also try to overcome what the "inferiority complex" resulting from powerlessness, caste restrictions, and relative isolation from the larger system.

The second paper, "A Study on Local Health Traditions of Communities Living in the Coastal Belt, including the Fisher Folk of Kerala and Lakshadweep (India)" was by Sreedharan Rajasekharan Nair and Palpu Pushpangadan from the Tropical Botanic Garden and Research Institute in Palode, Thiruvananthapuram, Kerala, India. The paper concentrated on natural health care systems of fishing communities of Kerala and Lakshadweep. Kerala has one of the most diverse tropical rain forests of India and many of the population until today make use of natural medical practices. However there is little known about indigenous knowledge amongst the fishing communities in this regard. Some 300 kilometers off the coast of Kerala are the Lakshadweep Islands, the smallest Union Territory of India with a population predominately of Muslims that mainly depend on fishing, coconut cultivation and coir making. The paper compared local health traditions of Lakshadweep and Kerala and tried to trace the cultural linkages. It was highlighted that Ayurvedic Physicians of Kerala enriched the medicinal knowledge in the Lakshadweep Islands. The paper presented some interesting findings regarding medicinal practices both in Kerala as well as the Lakshadweep. It looked at particular healing practices, and here especially on the healing power of some selected species of fishes. Local health traditions of Alappuzha, a coastal district of Kerala and the Agatti Islands of Lakshadweep were compared to demonstrate similarities that are the results of long-term connections between the two places. The authors made a strong plea to undertake scientific analysis of the plant, animal and mineral based applications, to learn more about their healing properties. At the same time it is crucial to protect the traditional knowledge and secure intellectual property rights.

In the third paper, "The Fishing Culture of the Indian Coastal Fishermen: Studies in Cultural Ecology, Ethnography and Folklore," Sarmistha Pattanaik from IIT Bombay (India) reported on her research activities on the importance of cultural ecology as a crucial and dynamic field of anthropology at Chilika Lake. Chilika Lake is situated at the east coast of India in the state of Orissa. It is one of the Ramsar sites in Asia. Chilika Lake is the biggest brackish-water lake of Asia. In recent decades, it has become a location of intense conflicts between people living for generations near the lake, and outsiders, who see the lake and its resources as a good source for easy profit. The paper gave a valuable overview of the cultural dynamics, the settlement pattern and social contexts of the fishing communities of Chilika Lake. The paper described the significance of the lake in the community life of people, the relationship between society and the aquatic ecosystem, various aspects of fishing and the many aspects of the importance fishing has for the communities living at Chilika Lake. The paper provided an ethnography of Chilika Lake concentrating on people's cultural perception of space and water.

After that the panel heard a paper, "Indigenous Management of Maritime Resources: A Study on Marine Fisherfolk Kolis in the Raigarh District of Maharashtra" by Samit Ghosal from the Anthropological Survey of India, Central Regional Centre, in Nagpur, India. The paper stressed the importance of fishing for the subsistence of people since time immemorial. Already in prehistoric times fishing provided a major means of livelihood. The emergence of "Maritime Anthropology" as an important sub-discipline of anthropology, however, is a recent phenomenon, focusing on the anthropology of fishing. The paper presented provides insights into the eco-cultural patterns of the Koli, a fishing community in the Indian state of Maharashtra. The study presented concentrated on understanding the fishing community's traditional knowledge system, crucial for the management of marine resources. Fieldwork for this paper had been conducted at Alibag, a small coastal fishing town in the Raigarh district of Maharashtra.

B.R.Vijayendran from the Anthropological Survey of India, Southern Regional Centre, Mysore, India then presented a paper on "The Impact of Technology and Globalization on the Gabit: A Fishing Community of Uttara Kannada District, Karnataka. As in other parts of India, also in Karnataka, fishermen are strongly exposed to changes from technology and economic globalization processes. These processes have distinctive impacts on the society and culture of the Gabit community, one of the fishing communities of Uttara Kannada district of Karnataka state. In the paper it was highlighted that Gabit fishermen are fast in adapting to modernization, despite their cultural diversity and their dealings with a unique marine environment and cultural ecology. The Gabit fishing community is mainly concentrated in the coastal regions of Karwar, Ankola and Kumta regions of Uttara