INTERNATIONAL COLLECTIVE IN SUPPORT OF FISHWORKERS (ICSF) TRUST

REPORT OF ACTIVITIES 01 APRIL 2011 TO 31 MARCH 2012



ABBREVIATIONS AND ACRONYMS

BoBLME Bay of Bengal Large Marine Ecosystem

BOBP-IGO Bay of Bengal Inter-governmental Organization

CBD Convention on Biological Diversity

CCRF Code of Conduct for Responsible Fisheries
CIFE Central Institute of Fisheries Education
CMFRI Central Marine Fisheries Research Institute

COFI Committee on Fisheries
COP Conference of Parties
CRZ Coastal Regulation Zone

DAHDF Department of Animal Husbandry, Dairying and Fisheries

DC Documentation Centre

DISHA Society for Direct Initiative for Social and Health Action
FAO Food and Agriculture Organizations of the United Nations
IAMSLIC International Association of Aquatic and Marine Science

Libraries and Information Centres

ICSF International Collective in Support of Fishworkers

ILO International Labour Organization

IUU illegal, unreported and unregulated fishing

MoA Ministry of Agriculture

MoEF Ministry of Environment and Forests

MPA marine protected area

MCPA marine and coastal protected area

NCSCM National Centre for Sustainable Coastal Management

NFF National Fishworkers Forum

SICOM Society of Integrated Coastal Management

WII Wildlife Institute of India WLPA Wild Life (Protection) Act

REPORT OF ACTIVITIES APRIL 2011 TO MARCH 2012

The International Collective in Support of Fishworkers (ICSF) Trust, with its office in Chennai, was set up as an "initiative to further the welfare of coastal and fishing communities through education, research, documentation, training and philanthropic programmes, by conserving and managing fisheries resources, protecting the marine and coastal ecosystem, improving working and living conditions in fisheries, and by ensuring fair access to resources and markets".

As in previous years, ICSF undertook programmes to support small-scale and artisanal fisherfolk in India from a perspective of decent work, equity, gender-justice, self-reliance and sustainability, through education, research, documentation and training, during this reporting year. In general, the focus was on:

- Highlighting the importance and viability of sustainable small-scale fisheries, and the need for specific support to the sub-sector;
- Highlighting the need to find a balance between livelihoods and the conservation and sustainable use of coastal and marine biodiversity;
- Providing greater visibility to women's roles in fisheries;
- Promoting safe working conditions for fishworkers within the framework of instruments under the International Labour Organization;
- Organizing training programmes and workshops on issues of relevance to small-scale fishing communities with the aim of promoting participation of fishing communities in decision-making and management processes;
- Monitoring issues that relate to the life, livelihood and living conditions of
 fishworkers, mainly through the activities of the Documentation Centre and
 disseminating information in appropriate languages to organizations of fishing
 communities, policy makers, researchers and the general public, through the
 website and through reports, newsletters, dossiers and other publications;
- Collaborating/ exchanging experiences with other institutions working on similar issues both in India and abroad.

A brief report of ICSF Trust programmes from 01 April 2010 to 31 March 2011 follows:

1. SMALL-SCALE FISHERIES AND RIGHTS TO RESOURCES

This programme is taken up with the objective of improving the sustainability and effectiveness of fisheries management by promoting responsible small-scale fisheries and the rights of small-scale fishing communities to inland, coastal and marine resources.

Following the decision of the 29th Session of the Committee on Fisheries (COFI) of the Food and Agriculture Organizations of the United Nations (FAO) approving the development of a new international instrument on small-scale fisheries to complement the Code of Conduct for Responsible Fisheries, it was decided to organize a national workshop to propose issues, relevant from an Indian context, for inclusion in the proposed guidelines. The *National Workshop on Sustainable Small-scale Fisheries: Towards FAO Guidelines on Marine and Inland Small-Scale Fisheries* was jointly organized by the National Fishworkers Forum (NFF) in collaboration with ICSF,

from 19 to 21 September 2011, in Kolkata. It was organized with the following objectives:

- to make the role of small-scale fisheries and fishworkers more visible in the context of food security, poverty alleviation and sustainable use of fishery resources;
- to expose non-fishery factors that threaten fishery-based livelihoods in inland and marine space, including natural disasters and climate change;
- to draw attention to the specific human development needs of small-scale fishing communities such as education, health, organizational development, social services, and financial and physical resources; and
- to contribute to the international civil society initiative to develop guidelines, within the framework of a human rights approach, for the proposed FAO international guidelines on marine and inland small-scale fisheries.

The 62 participants at the workshop were from both the marine and the inland sector and included fishworkers, representatives of fishworker organizations, NGOs and policy makers. Due to the different and diverse understanding of what "small-scale fisheries" means to each participant from different parts of India, it was found useful to explore this issue in detail during the workshop. The discussions and proposals from the workshop were synthesized into a statement. The workshop concluded with a symposium on 21 September 2011, to which policy makers were additionally invited. The Workshop and the Symposium contributed to a re-assessment of strategies and policies for fisheries management and development in India in relation to small-scale inland and marine fisheries. It was perhaps also the first time that representatives from inland and marine fisheries organizations came together to discuss common issues and concerns. Several useful proposals emerged from the workshop, that are reflected in the statement. The report of the workshop is available online. An article on the workshop was also carried in SAMUDRA Report. http://icssf.net/icssf2006/uploads/publications/samudra/pdf/english/issue_60/art09.pdf

Study/Bibliography

A study titled *Traditional knowledge in the Union Territory of Lakshadweep, India* was completed. The study attempts to compile and collate the traditional knowledge base existing within the community in the ten inhabited islands of the coral archipelago in South west India—the Union Territory (UT) of Lakshadweep. The study found that the traditional knowledge base of the islands centre around the physical parameters that sustain marine ecosystem-dependant livelihoods and sustenance strategies of the islanders. It discusses the perceptions of various stakeholders on the value and relevance of traditional knowledge and highlights the need to integrate this into planning, management and conservation of resources.

During the reporting year ICSF also developed a bibliographic country-wise database on community-based management and conservation initiatives undertaken by fishing and coastal communities in different parts of the world. This database fed into the training programmes that ICSF undertook during the year, and serves as an important resource. The review of literature that followed helped to identify different forms of community-based management practiced in different countries and contexts (described variously in literature as natural resource management, common property resource management, indigenous resource management, fisheries management, comanagement, etc). A draft of the literature review is available.

Video

A short video documenting perceptions of tenure rights among local communities fishing in Pulicat lake was prepared, as part of a project titled *The Governance of Tenure for Responsible Capture Fisheries*, a joint initiative of the FAO Fisheries and Aquaculture Department and the FAO Natural Resources and Environment Department that contributed to the larger effort of FAO to develop Voluntary Guidelines for Responsible Governance of Tenure of Land and other Natural Resources (VG). The video depicts issues of tenure rights in Pulicat lagoon, India's second largest lagoon home to around 30,000 artisanal fishers, mostly belonging to the Pattanavar community, and spread across 50 fishing settlements. The *padu* system practiced in Pulicat grants entitlements to eligible members (only men) of a particular community (Pattinavar) for undertaking stake net fishery (for catching prawn/shrimp) in certain designated fishing grounds in the lagoon, on a rotational basis.

2. MARINE PROTECTED AREAS (MPA)

Several activities were undertaken under this programme, as follows:

Delhi workshop

A workshop titled Fishery-dependent livelihoods, conservation and sustainable use of biodiversity: the case of marine and coastal protected areas in India was organized in Delhi on 1 and 2 March 2012. This was organized as a follow up to a workshop titled Social Dimensions of Marine Protected Area (MPA) Implementation in India: Do fishing communities benefit? that had been organized by the ICSF in Chennai, in January 2009.

The Delhi workshop was also organized against the backdrop of India's decision to host the Eleventh Conference of the Parties (COP11) of the Convention of Biological Diversity (CBD) in Hyderabad, in October 2012, which has the programme of work on marine and coastal biodiversity on its agenda. Notably, the theme identified for the International Day for Biological Diversity in 2012 by the CBD is also marine and coastal biodiversity.

The Delhi workshop brought together about 65 participants that included fishworker and support organizations, activists, scientists, researchers, lawyers, environmental groups, as well as representatives from the Ministry of Agriculture (MoA) and the Ministry of Environment and Forests (MoEF), Government of India, and from the State Fisheries and Forest Departments of West Bengal, Tamil Nadu, Gujarat and Maharashtra.

It reviewed existing legal and institutional mechanisms for creating, implementing and reporting marine and coastal protected areas (MCPAs); discussed the impact of MCPAs in India from the perspective of environmental justice and human rights; and, in the light of growing challenges facing marine and coastal biodiversity, made specific proposals based on good practices for *in situ* conservation of marine and coastal biodiversity, poverty eradication, and economic and social development of small-scale, artisanal fishing communities in India. The workshop was useful in evolving consensus on the need for participatory and community-led approaches to conservation and management of marine and coastal biodiversity. The report of the workshop is under preparation, and will be finalized and published in May 2012. It will also be made available online for wider dissemination.

Activities preparatory to workshop

Several activities were undertaken in preparation for the workshop. A study on legal issues related to community rights in national parks and sanctuaries located in coastal and marine areas in India declared under the Wild Life (Protection) Act (WLPA), was commissioned. The study, presented at the Delhi workshop, drew attention to several important issues as related to customary fishing rights in national parks and sanctuaries. The report of the study is available.

ICSF also undertook documentation of social issues in MCPA implementation in Malvan (Maharashtra) and Kutch (Gujarat). It collaborated with the Society for Direct Initiative for Social and Health Action (DISHA) based in Kolkata to organize six preparatory meetings—four in Sundarbans, West Bengal and two in Bhitarkanika and Gahirmaha, Orissa to discuss issues facing the coastal fishing communities living in and around the marine and coastal national parks and sanctuaries. The meetings discussed proposals from fishing communities with respect to how the governance of such national parks and sanctuaries could be improved, to allow for balancing interests of conservation and livelihoods.

Film on seaweed harvesters

The film initiated in 2010-11 on women seaweed collectors in the Gulf of Mannar National Park, in Tamil Nadu, India, was completed. The film, titled *Shifting Undercurrents: Women seaweed harvesters in the Gulf of Mannar, India* explores the challenges facing the livelihoods of women seaweed collectors in an area declared as a national park, where extractive activities have been prohibited. The film also explores alternatives being proposed by the women, in order to ensure the sustainability of both the resources and their livelihoods. Through dialogue with different groups it attempts to portray the possible ways forward. The film will be screened widely, including during COP11 in Hyderabad, to draw attention to the issues at stake, with a view to finding ways to resolve them.

Participation in meetings

ICSF participated in the *First Bi-national Stakeholder Consultation on Sustaining the Gulf of Mannar Ecosystem and its Resources*, Rameshwaram, Tamil Nadu, organized by the Bay of Bengal Large Marine Ecosystem (BoBLME) project in collaboration with the Bay of Bengal Inter-governmental Organization (BoBP-IGO) from 05-06 December 2011. A paper titled *Livelihood issues of fishers in the Gulf of Mannar* was presented.

3. CLIMATE CHANGE AND FISHERIES

The study titled Climate Change and Fisheries: Perspectives from Small-scale Fishing Communities in India on Measures to Protect Life and Livelihood was completed during this reporting year. Based on field studies in four States, the study assesses perceptions of fishing communities about the impact of climate variability/change on their life and livelihood, and the knowledge, institutions and practices of fishing communities of relevance to climate change preparedness. It identifies adaptation and mitigation measures that need to be adopted by fishing communities and the State in relation to climate change and proposes measures to protect life and livelihood of small-scale fishing communities in the context of climate change. The study is shortly to be printed for wider dissemination and discussion on the issues it has raised.

ICSF also continued to maintain the website on climate change and fisheries, to highlights issues affecting the fishing community due to climate change as well as proposals to protect life and livelihood of small-scale fishing communities.

4. WOMEN IN FISHERIES

During the reporting year ICSF continued to take forward the agenda of seeking recognition of the role of women in fisheries and their greater participation in decision-making. A study was initiated to understand the access of women fish vendors in Mumbai to markets and to vending spaces, as well as to decent facilities in markets. The study will be discussed with women vendors before being finalized in July 2012. Follow up activities will also be finalized after discussion.

5. TRAINING PROGRAMME FOR FISHWORKER ORGANIZATIONS

Based on requests from fishworker organizations and NGOs, ICSF provided inputs on issues related to climate change, coastal zone management, fisheries management and marine protected areas. These were provided during workshops and training session organized over the year. These inputs partially contributed to enabling local organizations to finalize their strategies and proposals around these issues.

The primer on the Coastal Regulation Zone (CRZ) Notification, 2011 was finalized during this period. This aims to promote awareness among fishing communities and support organizations about provisions of the CRZ Notification that may work for and against the interest of fishing communities, in a simplified manner. The Primer also reflects on how fishing communities can use the notification to play an important role in decision making, monitoring and enforcement with respect to the coastal zone. The primer, originally in English, has been translated into nine languages (Bengali, Gujarati, Hindi, Kannada, Malayalam, Marathi, Oriya, Tamil and Telugu). All versions are available on the ICSF website and may be accessed at http://indianfisheries.icsf.net/icsf2006/jspFiles/indianFisheries/coastal.jsp

6. MONITORING OF AQUACULTURE DEVELOPMENT

ICSF continued to disseminate information from the workshop *Small Indigenous Freshwater Fish Species: Their Role in Poverty Alleviation, Food Security and Conservation of Biodiversity*, organized in 2010, to link with groups working on these issues, and to monitor developments in aquaculture in general.

7. ILO WORK IN FISHING CONVENTION

ICSF continued to advocate for the ratification and effective implementation of the 2007 Work in Fishing Convention (WFC) of the International Labour Organization (ILO), to ensure better protection and conditions of work for those in the small-scale scale sector, and for workers on board large fishing vessels. As a member of the Task Force for Gap Analysis of ILO Convention (C-188) set up by the Ministry of Labour and Employment, ICSF participated in the Second Meeting of the Task Force on 3 October 2011, in New Delhi.

ICSF was also invited to make a presentation on the ILO Work in Fishing Convention during a two-day workshop on *Fishing Policy, Schemes and Laws*, organized on 19 and 20 January 2012, by Coastal Action Network in Chennai. The need to implement the ILO Convention in India was highlighted.

8. TRADE

ICSF participated in the thirteenth session of the FAO Sub-committee on Fisheries on Trade held in Hyderabad, India from 20-24 February 2012. ICSF made several interventions during the meeting highlighting the specific concerns of small-scale fishing communities with regard to trade of fish and fish products. These related to regional trade agreements, decent work conditions for fishworkers, market access for small-scale fish producers, and need for cooperatives of fishers and fish farmers to increase bargaining power to realise a fair prices.

9. Publication of SAMUDRA Report

The SAMUDRA Report, brought out three times a year, carries articles, from India and elsewhere, on issues of relevance to small-scale and artisanal fisheries in the developing world. Issues covered have included fisheries management, labour issues in fisheries, fisheries trade, gender in fisheries, coastal and marine biodiversity, rights issue in fisheries, etc. SAMUDRA Report is distributed to about 250 subscribers in India, apart from those in other parts of the world. It is also translated and printed in French and Spanish, and sent to subscribers in French and Spanish speaking countries, with the objective of raising awareness about issues facing small-scale and artisanal fishworkers, in India and elsewhere. SAMUDRA Report is also made available online, for wider dissemination. The following issues of SAMUDRA Report were published during the year 2011-12: English: 59, 60 and 61; French: 58, 59 and 60; and Spanish: 58, 59 and 60. All the above issues of SAMUDRA Report are available on ICSF's website.

10. PUBLICATION OF YEMAYA NEWSLETTER

Yemaya, a newsletter on gender and fisheries, carries news, views and articles from organizations and individuals working on gender issues in fisheries, from India and elsewhere. The newsletter helps in creating awareness on women in fisheries issues, initiatives being taken to support them, and helps in the exchange of information. Yemaya goes to over 50 subscribers in India, and also to those in other parts of the world. It is also translated and printed in French and Spanish, and sent to subscribers in French and Spanish speaking countries, with the objective of raising awareness about the role and perspectives of women in the fisheries sector, from India and elsewhere. Yemaya is also made available online, for wider dissemination. During this period, the following issues of Yemaya were produced and disseminated: English (37, 38 and 39); French (36, 37 and 38); and Spanish (36, 37 and 38).

11. DOCUMENTATION CENTRE (DC)

The ICSF Documentation Centre identified, as in previous years, important sources of information on specific themes of interest in fisheries; established links with other resource centres and sources of information; and sourced information in a timely manner, as and when needed in the required user-friendly formats. The DC undertook activities in the following broad areas:

- (i) Information identification, collection, and collation
- (ii) Information dissemination
- (iii) Support to ICSF programmes

(i) Information identification, collection and documentation Collection and organization of information

During this period, DC sourced information from fishworker organizations, NGOs, governments, research institutes, multilateral organizations, and other documentation centres on issues such as fisheries management, aquaculture, marine protected areas, MPA legislation, fisheries trade, women in fisheries, fish markets, coastal management, social security, labour dimensions of fisheries and aquaculture, etc.

The DC currently holds 56,318 records in its document database: 2,827 books; 9,475 documents including 184 CD-Roms; 24,766 articles indexed from journals, and 19,065 news clippings. Out of the document database of the DC, a "selected article database" was started and it currently holds 997 articles. The audiovisual collection has 184 DVDs/VCDs/VHFs. The DC has identified, ranked and categorized useful books and documents. Such information has been uploaded on a regular basis on the ICSF website under the useful books and documents list. This list is also circulated internally within in ICSF.

Linking with other documentation and resource centres

The DC, as part of its continuing efforts to link with other resource centres, has maintained links with the FAO library and the International Association of Aquatic and Marine Science Libraries and Information Centres (IAMSLIC) Network of libraries. The ICSF Documentation Centre has contributed to the aquatic commons initiative of IAMSLIC, uploading all recently published ICSF documents in the aquatic commons repository. During this period, ICSF continued to collaborate with FAO on the 'Safety for fishermen' website (http://www.safety-for-fishermen.org/en/), by contributing articles as well as news on safety at sea. Relevant articles from SAMUDRA Report as well as news from SAMUDRA News Alerts are being disseminated through this website.

(ii) Information Dissemination

Responding to requests for information

The DC received about 39 specific requests for information from various users including fishworker organizations, NGOs, governments, intergovernmental organizations, multilateral organizations, students, researchers, individual scholars, and ICSF members. The requests came from countries that, apart from India, included Canada, France, Italy, Japan, Netherlands, Spain, Switzerland, Thailand, and USA. Requests for information in print and audio-visual form were on various issues such as fisheries management, illegal, unreported and unregulated (IUU) fishing, marine protected areas, fishing capacity, etc. There was also increasing demand for information regarding climate change and fisheries and aquaculture. Users also sought information on issues of trade and post-harvest fisheries, including fish markets and women in post-harvest fisheries. There were also information requests on demographic and cultural aspects of fishing communities, their organizations, their campaigns and struggles. Other issues of interest were labour issues in fisheries and aquaculture.

DC News Alerts

The Documentation Centre has started a news service which includes both daily alerts and weekly digests compiling news items of interest on Indian fisheries. This is distributed to ICSF India members, non-governmental organizations, various state Departments of Fisheries, fishworker organizations, etc. Currently there are 230 subscribers to the news alerts.

ICSF Website and its redesign

ICSF completed the process of redesigning its website to move into a content management system (CMS) framework. This will now enable ICSF to develop, design and deploy sub-sites on its own. The DC was also involved in updating the ICSF website on a regular basis with information on various ICSF publications and activities.

(iii) Support to programmes of ICSF

The DC provided inputs to all ICSF programmes, including on papers and presentations prepared by ICSF staff, such as on fisheries management, coastal and marine biodiversity, marine protected areas, labour, trade, women in fisheries, small-scale fisheries, inland fisheries, aquaculture and social issues in small-scale fisheries.

12. OTHER ACTIVITIES

Participation in Other Meetings

- (i) Meetings of the Working Group on the Development and Management of Fisheries and Aquaculture for the Twelfth Five Year Plan (2012-2017)

 As a member of the Working Group on the Development and Management of Fisheries and Aquaculture for the Twelfth Five Year Plan ICSF participated in several meetings between the period April and September 2011, for discussions on, and drafting of, the Twelfth Five-Year Plan. ICSF's proposals were from a small-scale fisheries perspective, highlighting particularly the need to support the work of women in the sector.
- (ii) First meeting of the Sub Group I: Marine Fisheries (including Mariculture, brackishwater and aquaculture) related o the Development and Management of Fisheries and Aquaculture for the Twelfth Five Year Plan (2012-2017), Kochi, 24 May 2011
 - As a member of the Marine Fisheries Group for the Twelfth Five Year Plan, ICSF participated in the above meeting hosted by the Central Marine Fisheries Research Institute (CMFRI), Kochi, and provided inputs and proposals.
- (iii)Initiative to involve fisherfolk in the implementation of CRZ 2011, Chennai, 13-14 June 2011
 - ICSF participated in this workshop, organized by the Society of Integrated Coastal Management (SICOM) in association with the National Centre for Sustainable Coastal Management (NCSCM), which was to discuss participation of fishworkers in the implementation of CRZ notification.
- (iv) Meeting of the National Task Force (NTF) of BoBLME, Vishakapatnam, 01 July 2011
 - As a member of the Task Force for the BoBLME project, ICSF participated in the above the workshop to discuss the activities that could be taken up by the project.
- (v) Workshop on Marine Fisheries in India, New Delhi, 07 July 2011 ICSF participated in this workshop organized by DAHDF, Ministry of Agriculture and the World Bank that was to discuss the World Bank-led study on Indian fisheries.
- (vi) India-Sri Lanka Fishing Issues: International Experience Regarding Livelihood Concerns, New Delhi, 18-19 July 2011
 - This workshop was organized by the Observer Research Foundation to discuss India-Sri Lanka fisheries issues. ICSF participated and made a presentation titled

- Problems of Small-scale Fisheries, Palk Strait: How can International Best Practices in Fisheries Management be of help?
- (vii) Fourth Regional Training Course on the Conduct for Responsible Fisheries (RTC-CCRF), Chennai, 19 July 2011
 ICSF was invited as a resource person to make a presentation on the Role of women in the sustainability of marine fisheries at this training programme for

fisheries officials from four countries organized by the BoBP-IGO.

- (viii) Tracking Olive Ridley Turtles in Bay of Bengal Stakeholders Workshop for sharing Project Findings, Bhubhaneshwar, 20 July 2011 The workshop organized by the Wildlife Institute of India (WII) was to share the findings of the study on the migration patterns, habitat utilization, and other physical, biological and ecological parameters of the Olive Ridley turtles along the Orissa coast during the 2007-2010 period.
- (ix) CRZ, climate policy and role of International Financial Institutions: A meeting to discuss climate policy and World Bank and ADB interventions on the Indian Coast in the context of the emerging CRZ 2011 notification regime, Goa, 20-21 July 2011

 The workshop was jointly organized by NFF, Kabani, Delhi Forum and the Focus on the Global South to discuss current climate policy for the coastal regions and CRZ 2011, and to identify research and campaign ideas to protect the interests of fishing communities.
- (x) First Bi-national Stakeholder Consultation on Sustaining the Gulf of Mannar Ecosystem and its Resources, Rameshwaram, Tamil Nadu, 5-6 December 2011 ICSF participated in this workshop organized by BoBLME in collaboration with BoBP-IGO. The workshop aimed to re-evaluate the importance of Gulf of Mannar (GoM) for India and Sri Lanka and the present state of the ecosystem; review existing management measures and lessons learnt; learn about the ecosystem approach to fisheries as a management paradigm for GoM; identify the key stakeholders and their role in GoM; and reach an understanding on the need of binational cooperation in management of GoM and continuation of in-country activities towards this. ICSF presented a paper titled Livelihood issues of fishers in the Gulf of Mannar.
- (xi) Meeting of the National Task Force (NTF), Chennai, 24 December 2011

 The meeting was to evaluate the implementation of the second phase of the BoBLME project.
- (xii) Workshop on Fishing Policy, Schemes and Laws, Chennai, 19-20 January 2012
 - ICSF participated as a resource organization in this workshop organized by the Coastal Action Network and made a presentation on small-scale fisheries and the ILO Work in Fishing Convention 2007.
- (xiii) Workshop to create awareness of the CCRF and capacity building for effective implementation in India, Mumbai, 1-2 February 2012
 ICSF participated in this workshop, organized by CIFE in collaboration with DAHDF, Ministry of Agriculture. A presentation titled Taking FAO-CCRF to the Grassroots: Adaptation, dissemination and the role of NGOs, was made..
- (xiv) Empowering institutions: Short course on "Managing information in the digital age" New Delhi, 20-23 March 2012
 ICSF participated in the above course organized by the Centre for Science and Environment. The course was to build the capacity of documentation centre staff on managing information from digital and other sources.