Health Policy Analysis Institute - India Case Study: The Institute of Health System (IHS)

Amar Jesani



THE INSTITUTE OF HEALTH SYSTEMS

Copyright © 2010 The Institute of Health Systems (IHS), Hyderabad AP India.

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, transmitted or utilised in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without permission in writing from the Publishers.



The Institute of Health Systems Sivananda Rehabilitation Home Campus, Kukatpally, Hyderabad, TS - 500 072, India

Ph: 91-40-23210136/9,23211013/4

Email: ihs@ihs.org.in; http://www.ihs.org.in

Originally Published in 2010 and Reprinted in 2021, in Hyderabad

IHS Library Cataloguing-in-Publication Data

Health Policy Analysis Institute - India Case Study: The Institute of Health System (IHS), Amar Jesani

ISBN 978-81-7934-052-3

Includes bibliographic references

- 1. Health Policy Analysis Institute
- I. Amar Jesani

Pdf download: Free

Printing and Binding: INR: 250 (Domestic), US\$ 12 (International)

2021 Reprint Note:

At the time of original publication in 20110, the Institute of Health System was located in HACA Bhavan, Hyderabad, AP - 500 004, India. In November 2021, the Institute shifted to its present location in Sivananda Rehabilitation Home Campus, Kukatpally, TS 500072. In 2014, the Telangana State (TS) was formed out Andhra Pradesh, with Hyderabad as the State Capital. This reprint incorporates the new address of the Institute. There is no other change in content of the report originally published in 2010.

Preface

A case study of the Institute of Health Systems (IHS), Hyderabad was conducted by the Alliance for Health Policy and Systems Research (APHSR) – an international collaboration based within the World Health Organisation, Geneva, in connection with a Global Study of Health Policy Analysis Institutes (HPAIs) in developing countries. This study of the IHS, is a part of a larger six country study titled, "Health Policy Analysis Institutes: Landscaping and Learning from Experience" done with the support of the Rockefeller Foundation.

The objective of the study was to understand characteristics of the HPAIs that contribute to their sustainability and effectiveness in providing policy analysis and advice. The larger international research project was conducted in three phases: (a) Landscaping, (b) Literature Review and (c) Case Studies. In work on the landscaping mapped, the existing HPAIs in low and middle income countries were studied by analyzing basic data on their functions, location, products, staff size, longevity etc. Based on this work, initially eight institutions were selected for the case studies. But the research team could do case studies only in six countries that included case study of the IHS from India. The literature review provided conceptual framework for the study as well as identified themes for in-depth qualitative research for the six case studies.

This report has been prepared by Dr. Amar Jessani, who was commissioned by WHO – APHSR for the India Case Study. The report is based on a review of key documents of the institute viz., operation manuals, reports & publications and interviews that were held with the Staff, Board Members, Clients, and other Stakeholders of the Institute including Policy Makers.

8th December 2010 Director

Post publication note, 2021:

Following is the final report of the international research project on landscaping of health policy analysis institutes; published by the Alliance for Health Policy and Systems Research (AHPSR), World Health Organization (WHO):

Bennet Sara; Corluka Adrijana; Doherty Jane; Aikins Ama de-Graft; Hussain AM Zakir; Jesani Amar; Kyabaggu Joseph; Namaganda Grace; Walaiporn Patacharanarumoi, and Tangcharoensathien. Health Policy Analysis Institutes: Landscaping and Learning from Experience. Final Report. Geneva: WHO Alliance for Health Policy and Systems Research; 2010 Jun 29. Available at http://www.who.int/alliance-hpsr/evidenceinformed/alliancehpsr healthpolicyanalysi sinstitutesreport.pdf



Case Study: Health Policy Analysis Institute

India Case Study:

The Institute of Health System (IHS), Hyderabad, India

Contents:

I.	Introduction to the study:	02
II.	Purpose and Objectives:	03
III.	Method:	05
IV:	Procedures and data collection	08
V:	Context of India and Andhra Pradesh:	13
VI:	History and mission of the Institute	17
	VI-1 Establishment and evolution:	17
	VI-2 Current mission and goal:	22
	VI-3 Key values and beliefs:	25
VII:	Organisational structure and systems	29
	VII-1 Organisational form and autonomy	29
	VII-2 Governance, leadership and strategy	35
	VII-3 Human resources	50
	VII-4 Funding and sustainability	46
VIII:	Functions	50
	VIII-1 Scope	51
	VIII-2 Services provided	60
	VIII-3 Quality	62
	VIII-4 Influencing policy	63
IX:	Publications	73
X	Conclusions	85
XI	Annexures	86-98

I. Introduction to the study:

This study of the Institute of Health System, Hyderabad, Andhra Pradesh State, India is a part of a larger six country study titled, "Health policy analysis institutes: Landscaping and Learning from Experience" and its international Principal Investigator is Prof. Sara Bennet. It is done for the Alliance for Health Policy and Systems Research – an international collaboration based within the World Health Organisation, Geneva, with the support of the Rockefeller Foundation.

The larger international research project is conducted in three phases: (a) Landscaping, (b) Literature review and (c) Case studies. In work on the landscaping mapped the existing health policy analysis institutes in low and middle income countries including basic data on their functions, location, products, staff size, longevity etc. Based on this work, initially eight institutions were selected for case studies. But the research team could do case studies only in six countries. One of them is from India, the Institute of health System, Hyderabad. The literature review provided conceptual framework for the study as well as identified themes for in-depth qualitative research for the six case studies.

This report is only of the case study carried out in India.

II. Purpose and Objectives:

The importance of strong health policies and systems to the achievement of global health goals has recently been widely recognized. However the health systems of many low and middle income countries are challenged through a lack of a sustainable financing base, shortages and mal-distribution of health workforce, private sector actors that may detract from rather than contribute to health goals and a multitude of, frequently poorly coordinated, development partners. In this context the Rockefeller Foundation (USA) has been considering how best to target its own investment to support the development of domestic capacity for health policy and systems analysis and national policy formulation. The proposed study aims to inform the development of strategy at the Rockefeller Foundation and other organization and partners interested in such national capacity building.

In a targeted literature review designed to identify similar work that has sought to investigate the nature of think tanks or health policy analysis institutes particularly in low and middle income countries, three key themes emerges, namely, Autonomy, Sustainability and Capacity development.

Independence: In the literature we find three major arguments in favour of independent institutions, as they are likely to : (a) promote more innovative and creative thinking – a quality that the civil service is not known for; (b) have greater independence in determining which projects to conduct and undertake more objective analysis than civil service employees, who may feel beholden to their policy maker masters; and (c) attract better quality staff as they are not bound by civil service regulations.

Sustainability: While policy analysis institutes might be established by government, or initially supported by one prominent donor, in order to maintain their credibility as objective and unbiased actors, such institutes need to diversify their sources of funding. Sustainability however should not be interpreted solely in terms of finance, and issues regarding the establishment of appropriate governance mechanisms and leadership issues, among other factors, are all also critical to establishing sustainability.

Capacity: Without adequate capacity – in terms of research and policy analysis skills, but also broader dimensions of capacity, such as management systems, IT networks and communications capacity - policy analysis institutes are unlikely to survive.

Research Question:

What characteristics of health policy analysis institutes are important for their sustainability and effectiveness in providing policy analysis and advice?

Objectives:

- (1) To map existing national (and regional) health policy analysis institutes and current and previous initiatives to support the development of such institutes
- (2) To derive lessons, relevant to differing contexts, about appropriate organizational models and institutional strategies that contribute to the sustainability and effectiveness of health policy analysis institutes
- (3) To advise the Rockefeller Foundation and other stakeholders in the global health community about how best to support the development of health policy analysis institutes in low and middle income countries.

As noted earlier, the present case study is in fulfillment of the second objective.

III. Method:

In the first phase of the study (the landscaping), the existing health policy analysis institutes in low and middle income countries were mapped, and that included basic data on their functions, location, products, staff size, longevity etc.

Case study institutes were selected using the diverse case technique, that is, we sought to identify cases that were diverse in terms of their organizational forms, specifically including NGO, university and government ownership; and to identify cases from different country situations, with a focus on Asia and Africa.

The following criteria were used for selection:

- Established for a minimum of 5 years (for documenting their history and experience)
- Representative of a range of different organizational forms (NGO, University, Government, Multi-sectoral with a focus on health)
- Representative of different regional/country situations with a focus on Asia and Africa

The following eight institutes were initially selected and then approached for its willingness to participate in the study:

	Africa	Asia
NGO health-	Ifakara Health Institute	The Institute of Health
specific	(Tanzania)	Systems (India)
Government	MOH Health Policy	Institute for Health
organization	Analysis Unit (Uganda)	Policy and Strategy
		(Vietnam)
University	Health Economics Unit,	Institute for Health
based	UCT (South Africa)	Economics (Bangladesh)
institution		
Multi-sectoral	Ghanaian NGO (yet to be	New Era (Nepal)
	determined)	

For various reasons we could not cover all eight institutions. The multi-sectoral category was dropped as we could not do the study of the organizations planned in Nepal and Ghana. However, instead of the multi-sectoral NGO in Ghana, we could study the Centre for Health and Social Services (CHeSS), the Health NGO, from Ghana and it replaced the earlier planned the Ifkara Health Instritute from Tanzania.

Thus, eventually we could do the case studies of the following six institutions from Asia and Africa:

	Africa	Asia
NGO health-	Centre for Health and	The Institute of Health
specific	Social Services (CHeSS),	Systems (India) (18)
	Ghana (7)	
Government	MOH Health Policy	Institute for Health
organization	Analysis Unit (Uganda)	Policy and Strategy
	(13)	(Vietnam) (17)
University	Health Economics Unit,	Institute for Health
based	UCT (South Africa) (15)	Economics (Bangladesh)
institution		(13)

Note: The numbers in brackets provide the number of individuals interviewed in each case study)

The institute selected from India, the Institute of Health system, agreed to participate in the study.

The researcher interacted and worked with the institute to collect data. The following sources of data are used in this report:

(a) Document and financial reviews: Published and unpublished material of the institute, published material in media, journals, etc., the financial reports (for historical data, sources of income, expenditure patterns, etc)

- (b) Informant interviews Semi-structured interviews with a variety of key informants to get "facts" about the institute as well as to seek opinions about the institute and its functioning, etc. were carried out.
- (c) Direct observation the researcher visited the institute, interacted with the staff and made observations on the functioning and infra-structure of the institution.
- (d) Discussion of draft report with staff members of the institute: The draft report was shared with the institute and its feedback sought. The report was revised keeping in mind the feedback received.

The ethics review of the research proposal and protocols:

The principal researchers first applied for ethics review with the research Ethics Committee of the WHO. After the ethics clearance was obtained from the REC of the WHO, the local researcher applied for the ethics review with the Institutional Ethics Committee of the Anusandhan Trust, Mumbai. For ethics review the application form and the full protocol, including the proposal, tools of data collection, informed consent form, etc were submitted. The suggestions received from the IECs were incorporated in the proposal. On getting the approval of the IEC of the Anusandhan Trust, the research process was commenced in India.

IV: Procedures and data collection

The researcher contacted the IHS, which had already agreed with the Principal Investigator to participate in the study. Before visiting the IHS in Hyderabad, the documents of the institute made available were reviewed.

Documentation review:

The following documents were made available by the institution for the review by the researcher:

- (a) Hard copy of publications: They included all research reports, working papers and books; a full list of publication by the IHS and the list of publication arising from the work done at the IHS.
- (b) IHS director's report to the General Body and BoG: From the year 1990-94 to 2008-09
- (c) A document providing the "IHS track record" records up to July 2008
- (d) Financial audit reports from 1991-2 to 2008-09
- (e) A list of all projects done in last 20 years, with the names of funding agencies
- (f) The Human resource manual of the IHS
- (g) The Faculty manual of the IHS
- (h) The General guide of the IHS
- (i) The salary (pay) scales of the staff, as revised last in 2006
- (j) A note on history and mission of the IHS

- (k) Rules and Memorandum of Association of the IHS
- (l) Names and brief profile of the members of Board of Governors of the IHS as on August 2009
- (m) List of members of the General Body of the IHS as on August, 2009
- (n) List of members of the Executive Council of the IHS as on August, 2009
- (o) List of the employees of the IHS as on September 2009
- (p) A brief report on the work of the ethics committee of the institution
- (q) A brief report on the

Visit to the IHS:

Prior to visiting Hyderabad, the researcher, in consultation with the IHS prepared a list of the individuals he would like to interview. These individuals were contacted by the IHS to find out about their availability on the days of visit, and the date and time for availability to meet the researcher was finalized.

The researcher visited the IHS from September 7 to 12, 2009. When not out to interview respondents, all other time of the office hours was spent by him at the IHS, informally meeting and interacting with the staff and making observation of the institution. He was provided full access to the institution.

The researcher made a second visit on September 6, 2010, after revising the first draft of the report on the basis of the feedback received from the institute on the emails. In this visit, the researcher met the staff available at the institute and had interactions to get feedbacks on the second draft of the report. He also had a separate meeting with the President of the institute to

get his feedbacks. The final draft of the report incorporated all comments received by emails and orally during the second visit of the institute.

Interviews:

The interviews of the staff members were conducted at the office of the IHS, in a separate room. Full care was taken to ensure privacy during the interview – nobody was allowed to remain present during the interview, and auditory privacy was ensured.

The interviews began with the researcher explaining the purpose of the research, and he provided all information from the Informed Consent form. Thereafter a copy of the IC was provided to the participant, and s/he was given time to read and ask any question for clarification. Consent was also sought for the audio taping the interview, and the participant was informed that s/he may choose not to answer any question and may also withdraw from the interview at any time without providing any reason. After this process, and on the participant agreeing to take part in the study, the IC form in duplicate was signed by the participant as well as the researcher. While one copy was kept by the researcher, another copy was provided to the participant.

Individuals Interviewed:

We decided to select four types of individuals for interview for the study.

(a) The clients of the institute: The clients are organizations or departments or sections from the government, private agencies or donors who have in the last five years used services of the IHS by giving a project grant, consultancy, work contract or used the services of the faculty of the IHS for the furtherance of their objectives. The selection of the clients from the list of clients of the IHS was done by the researchers, while individuals from these organizations were identified with the help of the IHS. These individuals were independently approached to get their permission for interview. If permission given, the date and time of interview were set up in advance through the administration of the IHS. The written informed consent was sought from each one at the beginning of the interview.

- (b) Members of the Board of Governors and the Executive Council of the IHS: This category of individuals constitutes the leadership of the IHS. The names of all members of the BoG and EC were obtained from the IHS. The selection of the individuals was done by the researcher. The appointments for interview were organized through the administration of the IHS. The written informed consent was sought from each one at the beginning of the interview.
- (c) **Director of the institute:** The director of the IHS is not only the chief executive of the institute, but the senior-most faculty, and he/she formally represents the institute. The study took place at a time when a transition in the director was taking place at the IHS. The person who was director during the study period (from 2003 to 2009) had just laid down the office to take up work in Geneva, and the new director had taken over only a few weeks back. We could interview the new director during our visit. The person who was director during the reference year was interviewed later on, during his visit to India, on telephone. The telephonic interview was not audio-taped, but it was transcribed using the notes taken, sent to him for revision and approval by emails. The draft of the interview revised by him was used for the study. The interview of the present director was conducted and audio taped in his office after obtaining a written informed consent from him.
- (d) **Staff of the institute:** All staff in the category of "faculty" and "researchers", and the chief of finance were interviewed in the IHS office. Prior appointment for the interview was obtained, and written informed consent was also obtained before the start of the interview. All interviews were audio-taped.

Totally eighteen individuals were interviewed for this case study. Their background is as follows:

	Category	Number interviewed
a	Clients	07
b	BoG & EC	05

c	Directors	02
d	Staff	04
	Total	18

V: Context of India and Andhra Pradesh:

India is world's largest democracy. Since independence in 1947, India went through only 19 months of emergency in 1975-76 when using constitutional provisions some of the democratic processes were suspended. However, the country recovered from the same democratic means, with the organisation of the general elections. This also showed that the democracy has taken deep roots in India. Despite prevalence of poverty, low literacy. Ill-health etc, people of India have generally chosen the path of democratic means to express their opinion and affect changes. The judiciary and media, despite their limitations, have remained relatively independent and acted as corrective against gross distortion in the democratic processes.

There has been considerable progress in terms of key health indicators in India since independence. But despite good economic growth of last two decades, the further progress has been much slower. The decline in the Infant Mortality Rate and the Maternal Mortality Rate (MMR) has been very slow, so much that they have almost stagnated. High economic prosperity of the nation is accompanied by the high inequities and disparities, that is equally visible in the field of health.

In 2005 the Government of India began its most significant initiative in the health sector – the National Rural Health Mission (NRHM), to address the needs of the rural masses and to improve and reform the rural health care services. Similar initiative with focus on urban poor under the National Urban Health Mission is also taking shape. These missions are supposed to help the government in achieving Infant Mortality Rate of 32 and Maternal Mortality Rate of 100 by 2015.

The NRHM is promoting decentralisation, district-level planning, community participation and collaborations for the systematic reforms to improve the government health services and harness the NGO and private sector skills and resources for improving health status. Various components of the NRHM are implemented by the states. Besides, the Reproductive and Child Health program, RCH2, is very much central to the NRHM. Overall, these developments of over half a decade has brought emphasis on the improvements in the poor

performing states and districts, increasing efforts at community participation, involvement of local government representatives and NGOs, beginning of bottom-up planning exercises, strengthening of the health care institutions at all levels, promotion of the public private partnerships in various aspects of health care works, better recognition to the monitoring and evaluation; and health research in the improvement of system, and so on. In essence, both at the national and state level, the systems have opened up more for various collaborations, and is making gradual shift from the emphasis on direct or command controls to regulations.

The NRHM has also increased the value of various skills and resources – research, management, quality improvement etc resources and skills – for the strengthening of the health system. As a part of the NRHM, the government has established National Health System Resource Centre (NHSRC), with lots of autonomy in its functioning and funding support. With the increasing emphasis on improving public health resources and skills, there is more encouragement to public health education, too.

The NGOs in India proliferated long back, during the colonial conquest of India as a part of establishment of mission institutions, a part of other religious reform movements and also during the independence movement. The health NGOs headed by reformist minded community oriented health professionals emerged in India in 1960s and 1970s. They were expression of discontent against the government's failure to build public health system responsive to people's needs, the bureaucratisation of the existing system and so on.

However, the modern NGOs that emerged as critique and in opposition to the government gradually changed their approach in 1980s. That happened largely because of the realisation that the NGOs could innovate, provide new strategies etc but they could not replace the larger system. In 1980s there was lots of research to understand the health services and financing system in a holistic manner. This work actually showed that the health services were dominated by the private sector and bulk of the health expenditure was out of pocket, while to government spent less than 20%. There was a realisation that the reforms were needed in the public as well as private services and that the attention must be paid to the health system as a whole. This helped in forging a new positive relationship between the NGOs and the government.

Andhra Pradesh (AP): Andhra Pradesh has also witnessed proliferation of the NGOs in various fields, including health for long time. In last one decade this movement has only increased, more so after expansion of work in the field of HIV/AIDS. Some of the changes in the health system – that we recognize now as health system reforms – took place first in AP in 1987, much before in other more developed states or at the national level. The founder and present President of the IHS said:

"And actually it was around that time (i.e. 1987), a lot of health sector reforms happened in AP. I know today it was health sector reform. And some very path breaking reform activities happened in AP without any push or prompt by any international or national intellectual body. These were spontaneous reform activities initiated by the state government because of the engagement in a way by the new political formations.

In 1987, the government of Dr. N.T. Rama Rao, a charismatic politician who emerged from the telugu film industry, enacted four laws simultaneous that affected far reaching changes in the medical education, health system – particularly hospital system – and indigenous medical system. They were: (a) enactment of a law for establishment of health sciences university bring all medical schools as well as other health profession schools under the umbrella of one specialized university; (b) enactment of a law to bring all middle-level government hospitals under one organization called Andhra Pradesh Vaidya Vidhana Parishad (APVVP); (c) the law for the establishment of a super-speciality tertiary hospital; and (d) the establishment of the Andhra Pradesh Yogadhyayana Parishad (APYP), with a view to develop Naturopathy and Yoga in Andhra Pradesh, bringing together the Nature Cure Hospital, Gandhi Nature cure Hospital, Vemana Yoga Research Institute including Pranayama Research Centre under the Administrative Control of one authority.

Interestingly, these changes not only restructured some key services and education for health professionals, but also created new autonomous establishments with global budgets to run services more efficiently.

Subsequent to these reforms, the AP has actively collaborated with the international agencies – albeit with variable success in achieving objectives – and taken different kinds of health sector reforms forward.

AP government and the Ministry of Health at present are open to partnership with the independent private non-profit or for-profit organization. Indeed, it is actively looking for evidence-based policy inputs from independent organization. For instance, the Principal Secretary, Ministry of health and Family Welfare of AP said that:

"I am now noticing that there are areas because of lack of policy there has been no consistency in our approach. As a result, in something, which is as crucial as public health, there is no policy framework. There have been ups and downs, and as a typical kind of a civil servant oriented administrative system that we have...though we have specialists in the system, who advise us and aid us at different levels....even they are also rolling stones in a sack. We need that scientific evidence and then we need that kind of a policy matrix, and I can give you several examples that how because of lack of that, we are doing the trial and error method. Now very precious time, precious resources, precious opportunities in the meanwhile are lost or forgotten because I have not been given the benefit of advice."

He further emphasized that:

"Professional organisations will naturally have larger role to play and governments are keen to learn these are the days of professionalised approach to services. I am not a medical fellow at all but if I don't learn on my job, I think I am not going to achieve anything at all. It will be very ornamental kind of existence. So in this process of learning, if professional organisations are available at arm's length, it is easy for us to learn, easy for us to implement."

This view at the higher level of the state government is also reflected in the encouragement given by it for the establishment of a number of new institutions in the state. In the field of public health, too, it has recently encouraged the establishment of the Indian Institute of Public Health of the Public Health Foundation of India, which itself is a national level public-private partnership in the field of public health education.

VI: History and mission of the Institute

The emergence of the IHS as an institute in Hyderabad was from the critical need for health system research inputs in the government health services strongly felt by the enlightened civil servants of the state who were responsible for carrying forward the health sector reforms initiated by the state on its own. This organic connection between the needs of the state health system, the involvement of such civil servants and the institute has shaped the development of the institute in last twenty years.

Interestingly, while the civil servants and the part provision of direct or indirect financing state finance is involved in this endeavor, it is not a formal public-private partnership the way we know at present. Instead, it is a not-for-profit private venture initiated by a few civil servants and operationalised by them as well as other interested/like-minded health experts; providing research inputs to the state. A bulk of its finance comes from the state or from bi and multi-lateral agencies that provide project-based funding to private institutions with or without the recommendation of the state.

VI-1 Establishment and evolution:

In 1987 when the NT Rama Rao (NTR) government affected some health sector reforms by enacting four laws in the state legislature, a civil servant with medical background, Dr. Prasanta Mahapatra happened to be serving in the district of Vijaywada, a place that was chosen for the establishment of the new health university. He described the event as follows:

"... there is a background to that university of health sciences. A group of people had setup Siddharth Medical College in Vijaywada. It was a private medical college. the NTR Government had negotiation with this management of the Siddharth Medical College to take over that medical college to government. So the Siddharth Medical College people negotiated - if you take over this medical college, we have no objection provided you locate the university of health sciences here, and this becomes the University of Health Sciences' medical college. So the state government passed a law forming, setting up a university of health sciences and designated Vijaywada as its head quarters."

Since he was a medical doctor in the civil service, and happened to be serving in Vijayawada at that time, the Government of Andhra Pradesh appointed him as Officer on Special Duty (OSD) with the task to take over Siddharth Medical College and establish University of Health Sciences in its premises. Dr. Mahapatra has an interesting story to tell about how it happened:

"I was the vice-chairman of the urban development authority in Vijaywada. As I was based in Vijayawada, they asked. Actually in the beginning, the secretary asked 'would you be able to take additional charge'. I said I have medical background, I am happy. But eventually they realised that it required fulltime job. So even before my posting, they made it a full-fledged posting.

"(The) government called me over for discussion here (Hyderabad) in the secretariat and they said' we are proposing to issue this order appointing you'. So then I asked, 'Sir, where will be my office'? They said 'there is no building, there is no place to operate from...there is no office. You have to setup the office'. 'Where will I setup the office?' 'We don't know but you are going to take over the Siddharth medical college and then look for accommodation there or any other place'. Then I asked about vehicle. They said 'we don't have a vehicle for you but we will permit you to use your car'. So practically I started the university office in my car. I operated from my home in Vijayawada and then met the management of the Siddharth Medical College and then took over the building of Siddharth Medical College. And in four months, they appointed the first Vice -Chancellor Dr. KN Rao...the late Dr KN Rao who happened to be the son-in-law of Dr Radhakrishnan, the former President of India. He was earlier DGHS (Director General of Health Services) in Delhi. Prior to that, he was director medical Services in AP. So he was an eminent towering figure. They invited him to be the first Vice-Chancellor. So in four months, I organised the University Office, I arranged for the function to inaugurate the VC. After the inauguration of the VC, government appointed me as the Registrar."

The initiation of reforms in medical education, and the hospitals attached to Medical Colleges, brought new challenges for the system. These challenges opened the mind of Dr. Mahapatra to the Operation Research to improve management of the health sector. In his own words:

"In 6 months, government transferred all medical colleges along with their hospitals to this university. And as a result, we were saddled with 40 odd hospitals and medical colleges, and their budgets. And this was a new university! In the beginning I had recruited some 15-20 clerical staff through the employment exchange and I was giving them training and suddenly we are saddled with all these hospitals. And they placed the Director Medical Education office under our control, so practically I had to play the role of the Director of medical education as a Registrar because it took some time for the Director of Medical Education to be appointed.

"So when this transition came, this DME office put a proposal to the University for Rate Contract of surgical items. And we didn't know how to process that because it is a huge document (the document containing the list of surgical items had kept growing over years because old items whether still required or not, were never removed from it). We didn't know how to deal with it. So we had to constitute a study because there were more than 5000 items in that rate contract list. Since we didn't have time to go through that, we called for data on items purchased by the hospitals over the last five years. When we gathered data, we realised that $2/3^{rd}$ of the list of those 5000 items, not a single items was purchased by the teaching institutions in last five years. This was the first operations research taken up by me for a health care institution. This particular incident struck me a lot. Because you see the importance of operations research, this is a very small tiny piece of operations research in health care management. It immediately reduced our management burden to $1/3^{rd}$. $2/3^{rd}$ of the list was cut out."

Thus, the necessity of operation research support for improving health system management took root in the mind of the founder of the IHS in 1987 as the first Registrar of the newly established University of Health Sciences in Andhra Pradesh, it attained some concrete form after a year when he was appointed as the commissioner of the newly established Andhra Pradesh Vaidya Vidhana Parishad (APVVP). As mentioned earlier, the APVVP was another indigenous health sector reform carried out in 1987, and it was a statutory autonomous body,

with its own Governing Council and financial autonomy. The Commissioner acts as the Chairperson of the Governing Council. Under the APVVP, all middle level hospitals of the state were brought together with an idea that the global budget system and autonomy in financial management should improve their functioning. There were many challenges involved in operationalising the idea and to achieve autonomy – and so they became fertile ground for operation research to improve the management system. He was Commissioner of the APVVP from August 1988 to June 1990.

According to Dr. Mahapatra, "it's the APVVP which actually provided a context and a platform, where my ideas about health system research concretised and developed a lot". However, it was not so easy – "I really applied myself a lot, but I found that we were running into many problems on a day-to-day basis, many issues which really needed a lot of reflection, study and understanding". So he looked for research support from research institutions and University departments in Hyderabad. Since the APVVP had autonomy, it was able to offer money to any institute willing to assist it in undertaking such operation research. "But we didn't find any...you know....couldn't find any academician who was willing to take up this kind of research. As a result, I was pushed to develop the research capacity within the APVVP. So basically, how I went about it was, since it was a new organisation and we had the autonomy, I got people within my organisation who were smart doctors or somebody - I mobilised them." He also found faculty of university who were not ready to take up the task but were ready to help in their private capacity. In this period, though quick operation research, he developed appropriate recruitment tests for employees, the kind of packaging of medicine needed to ensure that the medicines purchased in rate contract were actually used by doctors and not prescribed from outside, and so on. He also developed the hospital formulary at that time.

So a prototype of the IHS or the IHS kind of research was developed within the government system - within the autonomous federation of middle level hospitals - due to the demand for the improvement of hospital management at that time.

But as it happens in the government system, this arrangement could not last longer. Initiatives for such operation research were still dependent upon the interests of the civil servant in position of authority. They had not crystallized as real establishment of structures within the

system. Thus, these initiatives faced crisis as soon as Dr. Mahapatra was transferred from the APVVP after working there as Commissioner for two years. Thus, on his transfer, it became important to establish some structural framework for the perpetuation of research that can help improve the health system.

This led to the second round of attempts to contact outside institutions – this time not for giving them projects for research but to convince them to establish a small cell or centre or unit within their organization to undertake operation research for health system improvement. This time, he targeted the autonomous research institutes established by the AP government. However, this did not succeed for various reasons. There was not enough interest, and when there was interest, there were organizational roadblocks, some related to local institution politics. They were also reluctant to provide entry to the civil servant to supervise such research in honorary capacity – there was some fear of losing autonomy as once the institute is opened for one, others may also try to gain entry.

Indeed, what comes out clearly is that existing government and government's autonomous institutes found it difficult to accommodate the interest of a civil servant in operation research in health system, when he may or may not be connected to the health department at all.

At that time, in 1990, the Ford Foundation had given a promise to Dr. Mahapatra to provide some funds for initiating such research. So it had become somewhat urgent to establish some structure to begin work. Thus, a decision was taken by him and few of his colleagues to establish a not-for-profit organization, and registration of the IHS as a society was carried out.

We interviewed another founding member, presently on the Board of Governors, of the IHS. He has the following to say about the objectives for which the IHS was founded in 1990:

"I think the vision and mission narrowed down to three-four areas. Essentially to do the research in Health System Management, teaching and training - training post graduates and other public health officials; and of course the research would be pertaining to any field of health and hospital administration."

The IHS started its work not by getting the first grant from Ford Foundation – though it was promised, it took some time – but by getting a consultancy to look at the NGO financing from the Voluntary Health Association of India. Dr. Mahapatra took two months' leave from his work to do this consultancy. The small grant from the Ford Foundation, then materialized, and gradually the IHS was established in a small place.

The growth of the IHS from 1990 to 1998 was very slow. In this period it had a part time director, an honorary director and two full-time paid directors. In the years 1996-97 and 1997-98, the IHS did not have substantial income either – but in that period it did do some work, particularly doing a survey in Mauritius.

In October 1998, the state government temporarily released Dr. Mahapatra from his work and sent him on deputation as Director of the IHS. He spent five years on deputation at the IHS. In this period he acquired, on the payment of rent, from the government the present premise of the IHS. Till 2004 or 2005, it had office with over 5000 square feet area where they began different courses, including the degree course in health administration. Unfortunately at that time the degree course did not get recognition by the University and the IHS was forced to discontinue it. This foray of the IHS in training did not succeed as was planned, but the investment it made in that venture led to a set back and financial crisis. It was forced to part with the half of the premise to reduce its over-head expenses, and it took few years to find some financial balance.

So after the spurt of growth in 1998-2003 period and then sudden set back, in last five years – 2005 to 2009, the IHS has stayed more-or-less stable. It has concentrated more on research than training courses in last five years. In the next phase, with the offer of land coming from the government, clearance by the University for its Masters in Public Health course and in collaboration with the LV Prasad Eye Institute, it is again poised to venture into the training.

VI-2 Current mission and goal:

The Memorandum of Association of the Society that provides the legal framework to the IHS states clearly that the institute, through its work, would contribute to the health of the people. The "health system" is defined broadly so as to include professional, technological, behavioural, social, economic, cultural and other sub-systems. As it says on its website, "the

health services, in India, had been viewed as a technological affair" and the IHS is a holistic endeavour to link various systems and sub-systems for the improvement of health of the people. Thus, its legal framework allows it to work on the health and medical care systems and at the same time also on the determinants of the health. Thus, the original goal of work on the systems for health remains unchanged, or rather, that over years, it has been re-emphasised again and again.

The original Memorandum of Association of the society lists 29 "Objects of the Society" and they are reiterated, verbatim in the "Faculty Manual", a document prepared for the guidance of the faculty of the IHS in 2001 and still used and applicable to the faculty of the IHS. Thus, these objectives are viewed as very important by the institution. The 29 objectives are as under:

- 01. To promote and provide for study of Health Systems, Health Policy, Health Services Management, Health Economics and Medical Sociology.
- 02. To identify processes that can work to improve the health of the people.
- 03. To observe processes that work amongst functionaries and beneficiaries of the health care delivery systems.
- 04. To inform locally viable solutions and innovations.
- 05. To assist in developing and strengthening of linkages for social development.
- 06. To develop, apply and disseminate knowledge about health systems and services, their organisation and management.
- 07. To conduct applied health systems research.
- 08. To promote good and appropriate management practices and encourage cost efficiency among health care delivery institutions.
- 09. To promote efficient material resources management by health care delivery institutions.
- 10. To promote effective human resources management by health care delivery institutions.
- 11. To promote improvements in the planning and management of hospitals and health services.
- 12. To conduct training, research and offer consultancy on the planning design and evaluation of buildings for health care delivery institutions.

- 13. To improve standards of health care by developing and applying management ethos, perceptions and skills.
- 14. To offer consultancy and advisory assistance to health authorities and HDIs in project formulation, appraisal, monitoring and related areas.
- 15. To conduct evaluation studies on the impact of medical and health care policies, systems, programs, schemes, projects, institutions etc.
- 16. To undertake research, development, teaching and consultancy activities to assist managers in provision of efficient and effective health care services.
- 17. To promote excellence in the health services management and development of good managers.
- 18. To undertake economic research training and consultancy in health and health care problems.
- 19. To undertake teaching research and consultancy activities, intended to increase the effectiveness of health care services.
- 20. To undertake research of matters concerned with organisation, delivery and management of health services particularly resource allocation, development of appropriate planning methodologies, evaluation of health care and measurement of health activities.
- 21. To promote development of standards and quality systems of health sectors.
- 22. To promotes adoption of cost effective regimen and appropriate technology in the health sector.
- 23. To carry out research and undertake consultancy educational and advisory services in cost reduction processes in health care delivery institutions.
- 24. To undertake research, training and consultancy services in policy development, application, monitoring evaluation of antipoverty, child development and nutritional programmes as well as other rural development and social services sector programmes.
- 25. To establish and maintain libraries and information services and facilitate the study and application of the principles of health services management, health economics, medical sociology and appropriate health policy, rural development, social services programme etc.
- 26. To constitute or cause to be constituted original branches at convenient centres in India to promote the objects of the society.

27. To co-operate with approved institutions and bodies for the purposes of helping the cause of improved and cause effective health care to the people.

28. To offer prizes and to grant scholarships and stipends in furtherance of the objects of the society, and

29. To do all such other lawful things as or conductive or incidental to the attainment of the above objectives.

This long list of objectives is encapsulated in a single paragraph by the IHS on its website as follows:

"The objectives of IHS are to promote and provide for study of health systems, health policy, health services management, health economics and medical sociology. The Institution has built up capacity in application of information technology to health care services. The objective here is to build up capacity in the specialized area of applications for health care systems and make it available to both public and NGO sector for locally viable, cost-effective solutions, rather than expensive or inappropriate technology import."

Indeed, what is given on the website relates more to what it has done in the past and the present priority of its work, while the long-list in its Memorandum of Association actually provides a possibility for it to expand its work beyond what it has done and is presently doing.

Mission Statement: The Mission statement of the IHS (as given on its website) embodies two major commitments of the institute, viz. (a) to undertake research, training and capacity building for people's health; and (b) to improve efficiency, quality and equity of the health systems. These ideas are express succinctly in its mission statement as below:

"Groom Skills, Gather Evidence and Generate Knowledge for people's health
To Improve the Efficacy, Quality & Equity of Health Systems"

VI-3 Key values and beliefs:

As a part of the legal framework of the society that makes the IHS, three commitments which express its foundational belief system, are codified in its Memorandum of Association. They

are: (a) it will be run with no-profit motive, and no commercial activity will be involved; (b) it would pursue its goal and objectives with peaceful – that it would not engage in agitational activities; (c) lastly, its office-bearers will not be paid from the funds of the association. Thus, from the members of the society it expects voluntary contribution in cash or in kind, and at the same time keeping possibilities open to use their paid services in some form on specific projects.

In the course of our discussion with individuals associated with the IHS, we could get some very interesting information on their perception of the key values the IHS is committed to. All through, two points came out very clearly: (a) that the IHS is not pursuing any partisan political or ideological agenda and (b) that it is committed to use scientific and democratic means for the health system improvement.

At the same time various individuals emphasized on certain value system they encountered in or with the IHS or could perceive as its positive feature. One client of the IHS first told how impressed he was with the personality of the founder, Dr. Mahapatra, and then said that it was not just his personality, but also the kind of system he created at the IHS that impressed him:

"My attraction is system....the system which he has created in IHS....the system I like it. The man...he will be here tomorrow (or may not be)"

What he actually meant by this expression was that certain culture of work has been established, that impresses him. He also felt that the IHS has capacity to forge inter-disciplinary team and commitment to work. Another client emphasized honesty and integrity of the IHS, and said that these values are integrated in its core managerial work.

The current staff at the institute talked about several values of the IHS that they appreciated. They included, of course what the clients mentioned, the honesty and integrity, the discipline, system of work, etc. In addition they mentioned the institutional commitment to high quality of work. A member of the staff also found that her/his commitment to work with the vulnerable section of people could be fulfilled because of the IHS's commitment to improving health condition of people in general.

One BoG member who had worked at the IHS earlier asserted that, although the IHS gets much less money than other organizations, it has greater credibility:

"I think the major difference (as compared to others), actually you know, (is) in terms of credibility, satisfaction, exposure in country and ethics-wise this (i.e. IHS) is far up"

"I think IHS has a good name in the government because once you talk about the quality they will refer to IHS."

The individuals at the leadership level emphasized (in addition to high quality and integrity) the "commitment" as the most important value that the IHS cherished. The term commitment was imbued with a range of moral meanings. For instance, it was argued that "we should have some commitment so that we can really have satisfaction in helping people". It is the "commitment" that makes people to forgo a government job or high paying private job offer; and join the IHS. The commitment could be to good scientific research; to high quality public health work, including research and training, to work with vulnerable strata of population, and so on. The "commitment" is also required to achieve some goal and to satisfy some ambition. And of course some of them talked about the commitment to social cause, to improving the system for the vulnerable people.

Another important value system that was emphasized by the leadership, the President of the IHS, was respect for the labour or recognition of dignity of labour. This was a part of the work culture ethics, and it was very cogently explained as follows:

"So we have followed a work culture ethics, basically one of the key human resource guidelines of IHS was to recruit people who have respect for labour. This was a Gandhian concept which we have made concerted effort to inculcate in the institute. Our understanding of respect for labour is that irrespective of the status of the person he should be willing to live up to the needs of the situation. In other words if the situation demands that the Director opens the door of the institute because there is no one else available in institute to open the door or sweep the floor if for some reason the sanitary workers have not come...then we pick up the broom and sweep the floor."

Just as work culture ethics, the IHS also had to look at moral issues related to the involvement of individuals working in the position of authority in the government, particularly about the conflict of interest and in deciding what kind of funds to take from the government. The President of the institute said that:

"We had decided to set the IHS up in private non-profit sector, and we took a decision not to seek Grant-in-Aid from the government in the beginning, at least for the first few years. We have changed that policy today, we have changed our view, but so far over last 19 years, IHS hasn't received any Grant-in-Aid from the government."

VII Organisational structure and systems

VII-1 Organisational form and autonomy

The organizational form:

A very important decision taken at the inception was to adopt the legal framework of a public society, registered under the Andhra Pradesh (Telengana Area) Public Societies Act 1350 Fasli (Act 1 of 1350F). This makes it a not-for-profit NGO, not undertaking commercial activities and its members not being paid from the funds of the association. As a society it has members, a Memorandum of Association that is a founding document for the purpose for which it was created and a constitution that governs its function and provides rules for the conduct of its work. Formally, the Public Society is considered more democratic and open form of organization structure as it is membership based than say the Public Trusts which have permanent trustees with no membership. But a more democratic structure could also have potential for misuse if wrong kinds of people are allowed to become members. So in most public society structures, the original or founding members normally keep some control over the procedure for providing membership to new members. This balancing is also done by the IHS, and that has helped it in having long term stability in its governing structure.

Members:

The IHS as a public society has several types or categories of members. Two types are the most important. One type is called "Charter Members" and another type is simply called "Members". In addition, it has provision for the institutional membership, honorary membership, "honorary correspondent" membership for the individual and institutions from abroad and a category of "Associate Member" for individuals and institutions from the country. All categories of members of the society together constitute the General Body.

Charter Members and Governing Board: Of the list of 32 current members provided to us by the IHS, 13 are Charter Members and 19 are Members – there is no member in other categories. The constitution of the IHS puts an upper limit of – maximum – 21 for charter members, while there is no such upper or lower limit for the number of members the institution general body can have.

The Charter Members are the most important, and have relatively greater role in the policy level decision making in the institution. All founding members were the original Charter Members, who then recruited members. The existing Charter Members also have power to invite anybody who satisfies the criteria of membership laid down in the constitution to be a new Charter Member.

As per the IHS constitution, the Charter Members constitute the Board of Governors (BoG), which is the highest level governance structure involved in policy making and oversight of the institute. In addition to being the BoG, the Charter Members also appoint the Chairperson, the President and half (i.e. three members) of the Executive Committee, the remaining half is elected by the General Body. In addition, the President of the society who is a Charter Member, acts as ex-officio Chair of the EC, thus providing a majority to the Charter Members in the EC.

Members, General Body and Executive Council: At present there are 19 members of the society, and they along with 13 Charter members constitute the General Body of the society. The Executive Council is the actual management body of the institution. It is composed of four members appointed by the Charter Members - one of them is the President of the society who chairs the Executive Council - and four members elected by the General Body. The Director of the IHS acts as the ex-officio Member-Secretary of the Executive Council.

Thus, the management body of the institute is democratically elected by different categories of members of the society, and it provides a kind of functional platform for the Charter Members and Members of the society to jointly manage the institution.

Dynamism in structure:

No institution could be stable and inspire confidence of the staff and funders if it does not combine stability with the dynamism. Constitutionally the structure of the IHS society gets its stability from the Charter members who are long time associates and dynamism from members who have joined and started making long term commitment. In addition, if both these balancing parts have their own internal dynamism then there are less chances of the stability degenerating into stagnation. While internal dynamism of the Members is easily

visible as from time to time new members join and those who could not sustain their interest leave. The infusion of new members provides new ground for the growth. At the same time some of them show long term commitment and thus create claim for Charter Membership. We therefore compared the current list of the Charter Members with the list of first batch of Charter Members, who were also the founding members of the society.

In the founding document, the total number of Charter Members who signed as founders of the society is 12. These founding members include in-service as well as retired government servants, academics and health professionals. However, all 12 founding members have not continued as the Charter Members. Of the 12 founding members, five are no longer Charter Members. And of the current 13 Charter Members, only 7 are the original founding members while the remaining 6 have been selected and appointed as Charter Members as per the procedure provided by the constitution of the IHS. The constitution of the IHS provides for the maximum 21 Charter Members.

To an extent this is a good testimony to the fact that even after two decades; a majority of the founding members has sustained their interest and support to the organization and thus have provided it continuity and stability. At the same time, the founding members have made adequate efforts to keep the highest body of the institution/society open to the entry of considerably large number of new members.

Director and finance officer:

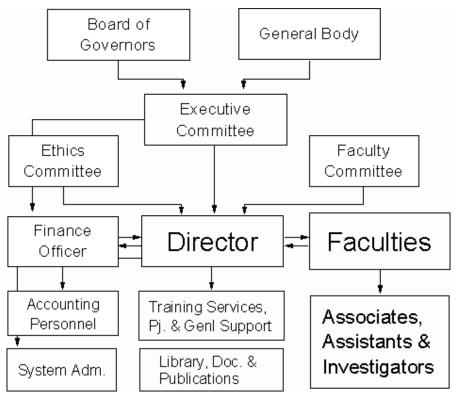
On day-to-day basis the institute is managed by the Director, who is appointed by the Executive Council. The Director has accountability to the Executive Council of which he/she is a member secretary. The Director is assisted by the finance officer who is also appointed by the Executive Council (EC). The EC as explained earlier is the management body of the institute and is responsible for not only recruitment of new members of the society but also in day-to-day management, that includes recruitment of the staff, infra-structure and finance management, human resources management and decision making in all other managerial works of the institution.

In addition, the EC is also responsible for the appointing Institutional Ethics Committee and in ensuring that it functions.

The structure also provides for a platform for the faculty members. In practice however this separate platform has been less used due to smaller size of the institute. Instead, the EC makes efforts to invite faculty members to the EC meeting as observers so that they are consulted on major decisions taken in the EC.

The Organogram:

Given below is the organogram providing the organizational structure of the IHS.



Autonomy

The autonomy or independence of the institute is a very important issue, more so with the IHS as it was initiated and established by still serving civil servants of the government, and it works very closely with the government institutes and receives financial support for its projects from them. Any restriction on the autonomy could also hamper the institution in taking up advocacy for the changes in the health system that it has found necessary from its own research and has scientific evidence to support such advocacy.

Opinion of clients: One of the ways to assess the perception of outsiders about the institution could be the opinion of those clients who have used the services of the institution. On the whole, despite having five out of seven clients from different departments of the state government, we received some very balanced and interesting opinion about the autonomy of the IHS.

One non-government client articulated the dilemmas and confusion that an outsider may feel about the IHS due to its history and organizational involvement of the serving retired government servants.

"See initially...there was a feeling it was a government...because of the involvement of the government officials, because it was set up by a government official. But what I could make out was that during my interactions, it was not ... there was no government control over it. Because the papers that they published, their opinions; were independent. What findings they came out with were all independent."

On the other hand, a governmental client expressed his admirations and misgivings in a very complex way. First of all he made distinction between the governance structure and the functional unit of the institution. He was clear that those in the governance structure, particularly the President and chairperson, were busy people, they would not get involved in day-to-day work of institution. Besides, they are people with integrity and they have positively imparted strong integrity to the institution. But they are not actually involved in research. That work is done by researchers. For instance:

"(He) has provided perhaps, frankly speaking, some kind of integrity to that institution, some kind of expertise kind of a thing, managerial experience. But basically he hasn't done anything in the (research). (Research) was done by other people – the IHS.

..... But that (factor, i.e. involvement of civil servant) is not the absolute, I can tell you. That is not the criteria. The criteria is not because somebody is there, No, No.

.

(The) IHS is totally out of bounds of government, independent in my view. There is no government clutch on that"

With this, the client was able to recognize existence of internal autonomy, not only the autonomy of the functional unit of the Pubic Society, but also the autonomy of the researcher and the research team, in addition to the competence, skill and the multi-disciplinary character of the team that made the research high quality.

However, the same client also lamented on the limits of the autonomy, by saying that while functional unit has autonomy, it is limited by the larger structure and its association with the system. While discussing the need to study Public-Private partnership and the extent to which it was strengthening or weakening the public system, the same client expressed misgiving:

"The question here is now again once they are outside, they can express (their opinion). Suppose if you want me to evaluate my own system, what is that I, even if I am having the ability and competency, would say. I would say, yes everything is going well."

The client discussed about some of the risks involved in strongly criticizing any policy of the government – risks for the institution as well as the officers involved. The politics in India is complex.

In our interviews with the staff and governing board members, we found very strong support for the idea of independence of the institution. At no time any of them was apologetic about the involvement of government servants in the IHS, on the contrary they took pride in stating that they have officers of high integrity from the government associated with them. One staff member clearly said that these officers, while being in the government are "not totally government". Within the government, too, they have their "own ideas" and they make "absolutely no compromise". They are indeed "suited for such an (independent) institution".

Another opinion from within stated that the number of people from government involved in the institution is so small – only a few – while the others, both in the membership and in the staff, grossly outnumber them. Those others are also assertive and have their independence. Besides, opined one member of the staff:

"To me ultimately at the end of the day, whether it is government or not, as long as the will and desire is there to do something good, and it is able to deliver and function independently, I think it's useful and it's good and I think connection with government is actually more helpful"

The issue of autonomy or independence could also be discussed in terms of what the institute chooses to prioritise for research and what it chooses to neglect. However, such discussion is difficult to carry out without being judgmental, for the choice of what one decides to do may be determined by many factors, including availability of funds and human resources. Instead, it is more appropriate to look at the content of the research output by the institution and the position taken on the issues chosen by it. From available literature, evidence and opinions of the persons we interview, there is nothing that can make one doubt about the autonomy that the IHS preserved in its research output.

The former director of the IHS – he was director during the reference years of this study, 2004 to 2009 – also emphased that there was no interference in his work from any member of the BoG. He expressed lots of appreciation for the general support and freedom or independence given to him by the BoG and the Executive Council. He put on record that there was no undue interference from any of them. The research he did or supervised during his tenure was negotiated by him with the sponsors and nobody tried to influence what he wrote in the reports. He also stated that whenever he needed some help, there were individuals in the leadership who came forward to provide support needed.

VII-2 Governance, leadership and strategy

The Board of Governors (BoG) of the IHS meets at least once in a year, some time more often depending upon the need. As a main governance structure, its role is very crucial in providing direction to the institution, policy making and as grievance redress body in case there is any dispute within the institution. According to one board member:

"I think (the BoG meets) every year, Basically, yearly once or twice the board meets and then the director will read out the financial report and then the technical report and they discuss about the issues."

The staff respects board members and look forward to the guidance from the BoG. One staff member expressed this as follows:

(From the BoG) I am looking mainly for their experience and advice because our governing board was constituted with an inter-disciplinary functions. So with lot of care it was constituted. What I feel is that they are all very committed people in their areas. So naturally I will expect very good advice and I am very fortunate to have all those people so definitely I benefit from their advice and other things, such as advocating the institute, Policy and strategic direction in terms of strengthening of our institute."

So individually, some board members are performing task of interacting, guiding, mentoring or acting as reviewer of the work being carried out at the IHS. Such interaction is informal and for intellectual inputs, rather than getting involved in the day to day affairs of the organization.

Of the Board members, the person the most involved in the institute is the president, both for being a founder as well as for being Chair of the Executive Council which is involved in managing the institute. One person from the broad group of leaders of the IHS interviewed by us said the following about his involvement:

"Of course he has been (idealistic), his ideals he has not left, but to some extent he is a chaste man. Earlier he used to be (a difficult person to work with). Now he has changed, he has become more accommodative, more practical, particularly in dealing with people. Of course he will not compromise and mortgage independence of institute, but wherever required he would not mind going and requesting people because his first priority is institute.. uska ghar bane na bane, institute to banna chahiye, uska aise irada hai."

So what comes out is that, as a body, the BoG does not meet very often, but at the same time the members of the BoG, at least some, do not remain aloof from the institution between two meetings. Such members remain in touch and interact with the institute to provide support to the director as well as the staff, and the work being carried out there.

As the highest body of the institution, the BoG does long term developmental work of the institute. However, there is no document like "Strategic Plan" of the institute is available. What we found instead from the minutes of the higher bodies and the interviews with a few members of the BoG was that the initiatives were discussed in the BoG from time to time and the members of the BoG tried to provide support or facilitate operationalisation of some of the plans. One member of the BoG said that:

"We continued to be with IHS for more than one reason that not only we feel we (i.e. HIS) are competent and one of best in our own way in strategy. We feel we are.... (involved in) the strategic financial management but also in probably assisting IHS in growing meaningfully. For example very recently we all got together to find some piece of land from government of AP. Of course all the credit goes to Dr Mahapatra, but I feel we all supported him and then because of the support of the members of the governing board...you know his strength was doubled. That made him re-double his effort and he managed to get the land."

Thus, at times the BoG does play very important role in setting the long term development strategy of the institution and at the same time, when needed, facilitates its implementation by the Executive Council and the Director.

At the same time, some serious concern was also raised about the lack of consistency in the involvement of the BoG in the strategic planning. For instance, the former Director of the IHS, who worked made great efforts in last five years to bring the IHS out of its financial and organizational setbacks, appreciated the support of the BoG, but felt that very few of them were able to take interest and give time, and that in general, it needed to be more consistent in mentoring and in providing direction to the institute. He stated that:

"We have good Board of Governors, but only few of them are adequately involved in the affairs of the IHS, particularly in the policy making and in giving direction. There is lots of talent there, and that needs to be sufficiently harnessed for the progress of the institute. There needs to be more intense involvement and discussion among them for those activities that have long term implications for the institution. The strategic and financial plans should emerge from there."

Executive Council: While the chief role of the EC is in managerial decision making, it has direct link with the BoG with three persons from the BoG as its members and the President acting as its Chair. Thus, a symbiotic relationship between the BoG and the EC exist. It is often difficult to find out whether a particular idea for the further development of the institute emerged from the EC or BoG. However it is clear that the EC does not act simply a managerial body but also contribute in the strategic thinking of the BoG, and the strategic decisions taken at the BoG are implemented by the EC.

We inquired with one EC member about the strategic plan for the institution:

"Document-wise aisa nahi hoga (the strategic plan) (i.e. there may not be something like strategic plan on record), but obviously milneke baad (i.e. after the meeting) decisions taken are recorded and circulated - what should we do, what should be our aim, like whether to go for this public health program or not, whether to approach the government, how to raise the funds, this type of things will be there. And salary of people will be another thing (discussed in meetings). (There will be discussion) about this government land and government university giving the MPH permission, how to go about running that course. Now we are going to run this course at L V Prasad as it has volunteered to give their lecture halls and other facilities for us with whatever faculty in-house, the executive committee, in the society, we'll be using them mostly and if not available then we'll be outsourcing things and doing the course now.."

On the other hand, the newly appointed Director of the institute (who is also member secretary of the EC) felt that there was a need to do good strategic planning as the institute is entering new phase of development. He said:

"I want to do some research and come out with some strategic plan. I think strategic plan may be ready in another six months. Yes, in the governing body and we'll finalize and we'll go ahead with. I want to do it. Now we're going for establishment of one state of the art educational institution. So, on the land the government has given us I want to have the development of human resources by taking various courses related to health or health informatics, health infrastructure, statistical methodologies for research."

At present, the missing element in the leadership structure is the Faculty Committee, whose recommendations and opinions on the research and other technical work related issues could have gone in the decision making by the EC and BoG. This deficiency of course does not appear to be a structural one, but caused by the fact that the institute does not have senior faculty to constitute big enough forum for having such a functional Faculty Committee. However, for time being this deficiency is being filled up by ensuring that when the EC meets, the faculty members are invited as observers and thus consulted in decision making.

There was strong emphasis by the individuals we interviewed on the issue of leadership – almost all of them felt that for the development of the institute, a dynamic and competent Director is very important. There was lots of appreciation of the previous director (Dr. CK George) for his achievement in bringing the institute out of its financial crisis and for stabilizing it. His intellectual contribution was also highly appreciated. There are corresponding expectations, perhaps even more due to new developmental phase of the institution, from the new Director, who they considered good in institution building and scaling up. On the other hand, some individuals gave hint that it was time for Dr. Mahapatra to leave the government and take direct plunge in the institution building – more so if the IHS wants to emerge as nationally important institution for health policy research.

Institutional Ethics Committee (IEC): The IHS established its Institutional Ethics Committee in 1998. Its first meeting took place on November 14, 1998 to review research protocol of one project. The second meeting of the IEC took place on 28 Dec 2001 to review one project proposal. On Jan 7, 2003 the third meeting took place where it reviewed seven proposals. The fourth meeting of the IEC took place on July 13, 2004 and it reviewed two proposals. After the fourth meeting in 2004, the fifth meeting of the IEC took place after five

years, on July 3, 2009 to review one proposal. The sixth meeting of the IEC took place on October 22, 2009 to review one proposal.

Thus, in last 12 years, the IEC has met only six times, and ethics reviewed only 13 research proposals.

Indeed, there is a need to improve the functioning of the IEC – in terms of regularity of its meetings and the number of proposals sent to the IEC for review. The institute must ensure that all research taken up by the IHS is ethics reviewed.

At the time of the establishment of the IEC in 1998, the Terms of Reference and Memorandum of Association of the IEC were adopted by the institute. However, thereafter, there has not been any updating of the documents and the Standard Operating Procedure (SoP) of the IEC not designed. The model SoP and other documents are readily available on the ICMR website and they should be adopted for the needs of the IHS.

VII-3 Human resources

The human resources constitute the most important element of any research institute. Their work make the institute known, brings support to the institution and over all appreciation from all quarters.

In terms of broad development, and so also in terms of the human resources, the IHS has gone thru three different phases of development, and perhaps the fourth phase has just began. The first few years, from 1990 to 97, were initial slow years of growth when the institute was just struggling to stand on its feet. Thereafter, the five years – 1998 to 2003 – when Dr. Mahapatra joined as Director on deputation from the government, there was expansion of organization in terms of infra-structure, funds available as well as human resources. In this period, the policies related to human resources, were revised and systematized. Thus, painstakingly prepared documents on human resources policies in the years 2002 and 2003 are available. The documents include general rules, Salary scales, Manual for the Faculty and a very elaborate Human Resource Manual.

However, there was a setback as the developmental plan of adding the organized academic training component did not work, leading to massive deficit. The faculty recruited during this period therefore faced crisis – there was no funds to pay their salaries. For months, the staff went without salaries, and so one after another, the staff left. From 2004 onwards much of the efforts were for overcoming the financial deficit (including paying the unpaid salaries and dues of the staff that left) and stabilizing the institute, so no new senior faculty was recruited. In 2009 the revival phase got over and the institute was preparing for a new development plan, with the acquisition of new infra-structure in terms of land, and also establishing collaboration with the larger LV Prasad Eye Institute for running courses.

Human resource policy

The Human Resource Manual if the IHS is a very elaborate document laying down policies in almost all aspects of recruitment, appointment, performance appraisal, training and development and the departure or separation of the staff from the institution. On reading the Manual one feels that it was prepared with the vision of rapid expansion of the institution necessitating detailed guidelines on all matters related to the human resources. It also attempts to formalize many of the processes such that they become a part of the norms of the institution. However, given the uneven development of the institute in last 20 years, it is obvious that the institute cannot follow every guideline of the manual like a rule at all times, but make efforts to adhere to the broad framework of the policy.

I was told by the staff member in charge of the administration and finance that:

"I think you can say that earlier the IHS setup was in organised manner. (After) 2003, ... because of financial crisis and resignation of major staff at that time, we didn't have the proper human resource staff. For that reason, we operated in a very flexible way so we can come out of the crisis. So proper system had not been followed but still some procedures which we are bound to follow, we have followed...otherwise some flexibility was offered. Like odd timings, the timings which were 10-5 or 10-6, but people can come from 11 and go at 9 O' clock in the night."

Such flexibility, whether as a policy or due to crisis, particularly for the research staff and faculty, may not be looked at as any aberration for the institution.

For those employees working as the staff (also called "permanent employees") of the institute, the institute has elaborate salary scale, revised and adopted in 2006. The salary components include basic pay, dearness allowance, provident fund contribution, health insurance and medical contingencies and leave salary contribution. Of these, the health insurance is not the group insurance purchased by the institution but given as reimbursement of medical expenses – its upper limit is set at 4.75% of the basic pay. There is no accident insurance provided. The finance staff member stated that:

"No (we do not buy insurance policy with insurance company). The basis is that nowa-days the turnover is more. ... That's why we have an option, if we have more employees we will go for group option."

According to a member of the EC:

"IHS (salaries are) just above the market. (Competitive with) Corporate, No; University, yes. Yeah we try to keep on par with them (6th pay commission). ... They (employees) have a health insurance type of thing. We were paying ESI (Employees' State Insurance) earlier but we got out of ESI once the staff said they were willing to get out of it. Provident Funds and other things are regularly paid. They all are provided Transportation Allowance, some bus passes and others. In fact for higher level people, having two and four wheeler vehicles, there is allowance - the conveyance allowance, petrol allowance - separately, over and above the salary. That is, very good allowance is there, scale is good on par with government, AP government. And for working, they have a second Saturday as holiday when everywhere else six days a week is a functional norm. They observe all the government holidays and others. And we have (maternity leave), for 84 days, which is a standard that is only given."

These salary rules of course are not applicable to those employees who do not have status of "permanent employee". Of 26 persons employed by the IHS, only nine have status of the "permanent employees"!

Recruitment of staff and their retention

Although there are guidelines about recruiting the staff by making public notification of the post in employment exchange, advertisement in newspaper or the on the Web, this is not often adhered to as many times staff is recruited through the informal network. Of the five staff members interviewed, all of them had were informed by the informal network, or somebody they knew in the IHS rather than information received from the public notification. In one case, not only the candidate but few of her friends too applied as they came to know from her mother's friend about opening for research assistant. In another case, the knowledge came from a member of the BoG as she was working as research assistant with her. This does not mean that public notification was not issued by the IHS in all those posts, in some they could have. Not only that, the candidates went through the interview, which was not waived in any case.

There is acute problem of the retention of staff, not only in the IHS but also in most NGO based research institutes in the country. The average stay of the staff, particularly in research, is often two to three years, not sufficient for them to grow in the job and provide profile to the institute. The problem is compounded because often the already established well-known seniors do not join such institution, but the starters and middle level ones, who need a few years of mentoring to really prove themselves as good researchers, join. By the time they do—i.e. prove themselves, they leave. Such institute may become only stepping stone for more ambitious pursuit of the staff. Indeed the problem of retaining staff is multi-factorial, where the amount of salary that an NGO-based research institute could pay is one but significant one. Those who stay back in the institute for longer time often do so because of their voluntary commitment to certain specific kind of research, or satisfaction of doing something worthwhile for the vulnerable people.

One person from the leadership body (the EC member) cogently explained problems of retention of staff as follows:

"But we lose the people when they come to a particular level. The outside people like other NGOs and others that keep on head hunting and they offer better salaries which we cannot afford to give. That's the main reason. Turnover of staff every 3 years is a disadvantage in that we have to keep training and we have to spend some resources on training them. But maintaining them, giving them higher, double the salary is not cost-effective as is taking fresh people and training them. We do not have that luxury now. We had about 6 good capable research faculty, with good qualifications but we had to forgo them when we had to cut down the size. We had to let them go. Now we are again growing, now we need to have of course people with some academic background. (The reason staff leave is) Mainly the finances; they left because they were offered a better position with a better salary, not less than double the salary they were getting here."

Number and profile of current staff

(See Annexure 2 for the list of the employees)

At the time of the study, the institute employed totally 26 employees. Interestingly, of them only Nine (including the Director) or one third have status of "permanent employees" while the rest are called "contract employees". Since all employees are essentially "on contract", this categorization has something to do with the quantum of salary and privileges or social security provided to the employees by the institution. Accordingly those who are termed "contract employees" do not enjoy privileges of the salary scale, allowance and some social security benefits, while those who are termed "permanent" are provided those benefits. A large number of contract employees works as field staff.

Of the nine permanent employees, four are researchers (including the Director), while one is finance officer and the remaining four are junior staff and assistants in administration and laboratory. Of them, the finance officer is with the institute for longest duration of time, since March 2003, or six years. The three researchers have spent about 3.5 years each on the average with the institute, while the Director joined in the same month of 2009 when the interviews were conducted. Three researchers are all women, while the director and the finance officers are men.

The highest education qualification of the research staff is M. Phil., but nobody has the Ph.D. Of the four researchers, one each comes from the discipline of statistics, nutrition, social work

and micro-biology. So the researchers are from very diverse background. None has medical background, or has post graduation degree in public health, but all of them have some track record of work in the health sector before joining the IHS.

There is no doubt that a major weakness of the IHS is lack of senior researchers, with capacity to conceptualise research, supervise its implementation and have capacity to do scientific writing. This is a very serious handicap that needs to be remedied. The former director of the IHS summed up the situation in a succinct way as follows:

"I really enjoyed my tenure there. I think I did lots of work on many things. But as a director of small institute, with few senior faculty, the work was quite hectic. I remember periods when I used to work on two or three reports at a time. Yes, I agree that in such situation individuals do get burnt out. We were cognizant of this problem from early days. However, it is a classical chicken and egg situation. Without having senior faculty it is difficult to raise resources in a sustainable manner. At the same time we cannot afford senior people without having the financial resources. IHS must maintain a minimum threshold of human resources (the senior faculty). It needs some more people who could conceptualise and implement research and at the same time, do the writing.

Research Fellowships and Internships at the IHS:

The IHS offers research fellowships and internships to individuals on short term basis – maximum up to one year. The fellows and interns are paid some stipend during the period of their work at the IHS.

The Fellows and Interns have contributed to the IHS in terms of providing assistance in data collection on various research projects and/or by providing assistance at the water quality laboratory at the IHS. Few outstanding ones have also participated in data analysis and writing papers of the research done. In the period 2005-09, two papers were co-authored by them while in the period 1991 to 2004-05, they co-authored six papers (See <u>Annexure 5</u> for details).

VII-4 Funding and sustainability

(see **Annexure 3** for financial analysis tables)

As explained earlier, the funding is a major challenge that the institute has faced. In many ways the ups and downs the institute experienced have been due to the funding combined with the movement of human resources. The unpredictability of two major components of the institution – the funds and human resources – has made the institute vulnerable from time to time.

Sources of funding

Most of the fund is raised as research and project grants and as consultancy work. At the inception the institute had adopted certain principles about the kind of funds it will not be taking or will avoid. The first was refusal to take grant-in-aid from the government. This had some rational, like avoiding conflict of interest as civil servants are involved in the institute but also the fact that easy availability of the grant-in-aid could make the institute look like government agency or the negative aspects of the government type agency may make the institute less effective. Evidently after 19 years, the IHS has decided to revise this stand and not to say no if the grant-in-aid is available. The second principle they adopted was not to accept contract research work. The president of the IHS explained this as follows:

"This is another decision we took... whether sponsored research or contract research work. We took in the beginning a conscious decision again in the favour of sponsored research project and similar consultancy, but not contract research. The difference between sponsor research and the contract research work, as you know, is in contract research the funding agency can restrict that you won't share the findings or data or anything with anybody. So as a result the research findings that you arrive at remains secret and at the mercy of the financing agency, it is only when the funding agency releases that, you can publish. Sponsored research allows you to publish your results. We also follow the policy followed by premier organisation like Harvard University for example. The Harvard University follows a policy that when they take any sponsored research activity from the funding agency or a consultancy project, if the funding agency is particular to have privilege over the data and the findings, (then)

all that university agrees is (that) up to one year the university would keep the data confidential. After one year, university is free to do publication. So the client has the privilege of access to any research finding and data for one year. We follow the same approach. So because of this restriction, the institute has grown at a very slow pace."

There is no doubt that regular grant-in-aid from the government would make the institute financially stable, but the basis for which they had earlier decided not to make efforts for the same would still remain and may make them uneasy. Alternatively, they would need to attract adequate private funding on a long term basis to ensure the stability of the institution with few senior faculty able to work on a long term basis with competitive salary compensation.

Sources: The data on the financing of the institute are given as appendix at the end of the report, but the abstraction of key information from it in the following table on the sources of funding makes it clear that the institute is dependent on the government or government facilitated sources for the bulk of its financial requirement.

Sources of funding (figures are percentages)

Source	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
Government, including	14	73	43	60	22	56
ICMR						
UN agencies and bi-lateral	71	13	26	20	58	22
agencies						
Private Foundations –	11	14	31	20	20	22
Indian and Foreign						
All Others	04					
Total	100	100	100	100	100	100

Around four-fifth of total funding every year for last seven years have come to the institute from the government sources or from the UN and bi-lateral agencies. The private funding has been consistently around 20% barring one year when it reached its maximum of 31 percent of the total funding of the year.

In the absence of the core support fund to protect its core staff, infra-structure and core programs, the institute is greatly dependent on the funding where the facilitation with various departments of the government is often vital. In long term it could have some negative consequences for the institute. This does not mean that it should forgo the funds it is able to raise from these sources. Rather, it needs to increase the contribution of funding from the private and other sources, including the services it may be providing, to counter-balance, and in the process also increase to total fund availability every year for the institution.

Overheads

The component of over-heads, particularly in the government funds, is very low, often not at all. So the estate expenses of the institutes have to be budgeted within the budget of the project. Besides, the institute has not bidden for the projects in funding sources (e.g. NIH, Welcome Trust, etc) that could provide good overheads, but for that the amount of work that needs to be put in for the preparation of quality research proposal is very high.

In last few years, the total annual expenditure of the institution has been between 5 to 8 million rupees. A turn-over of this amount for an institute with history of work for two decades is very low. Even at an average level it should have been 20 to 30 million, as is found on other NGOs that have endured the vagaries of time in the way the IHS has done. The only good feature in the financial condition is that despite acute financial crisis, the institute has accumulated some – though not very large – amount in corpus fund.

Changes in funding profile over years

Indeed, over the years, somehow, the basic sources of income of the institute have remained more or less unchanged. In terms of the proportion of funds contributed by those sources, the change is not very striking.

Business development or fund-raising unit

The institute does not have any unit, or a formally constituted team of experts helping it in fund-raising efforts. The fund-raising is normally done by the President and Director, while the members of the BoG and EC supplement their efforts.

Role of Governing Board in fund raising

Some of the members of the BoG, particularly its president, are at the fore-front, along with the director, in the fund-raising efforts by the institute. Many of the members of the BoG also facilitate the fund-raising efforts by other means. But almost all members of the BoG and EC do make some efforts possible within their capacities.

The BoG members have also contributed money to the institute to tide over financial crisis from time to time. For instance members of the BoG said:

"I used to donate 15 thousand I think for 5 years or 6 years whatever. I mean that is very small amount that you can buy a table or a chair. That would not really help the institution in growing. But we tried actually."

"We are not to be benefited either monetarily, in fact we supported IHS monetarily at times".

However, it must be noted here that the chief responsibility of the fund raising is on the Director of the institute. There is no formal core group of fund raisers to assist the director.

The institute and leading members described several different kinds of efforts made by them for raising funds, particularly core fund or institutional support fund not tagged to particular project, but they could not succeed. Their efforts included advertisement in newspapers and locally to get funds with the offer of tax benefit on the institution's registration under the Income tax Act section 80G, direct approach to the Indian private foundations that have good track record of funding academic, research as well as community based activities, and so on.

VIII: Functions

Interestingly, while the need for the establishment of the institution, as described earlier, emerged from Dr. Mahapatra's need to undertake operation research for improving management of the public health system, particularly the hospitals, the beginning of the work of the IHS was from a relatively broader perspective of the health system. In fact, this aspect has stayed with the IHS since then in the sense that even while providing service to the public health system, it has kept itself anchored in the broader health system research. The first work the inaugurated the functioning of the IHS was done by Dr. Mahapatra taking leave for a couple of months to study the financing of the NGOs or voluntary organizations in Andhra Pradesh. This was a part of a larger study promoted by the Voluntary Health Association of India (VHAI), Delhi on the health care financing, particularly in the NGO sector. Indeed, this beginning provided an excellent opportunity to the IHS to learn from the work being done by other NGOs, and get networked with the NGO community.

However, following this first project, when the IHS got opportunity to get funds from the Ford Foundation, it did not make provision for the recruitment of any senior faculty and opted for only research assistant as they felt that no senior would be interested in such work and that those who initiated the institute would provide voluntary support to supervise research work at the institute. This made its initial progress in institutionalizing the organization slow. Only three years after its establishment the institute got some impetus when they recruited full-time director and gradually full-time faculty.

Given the experience of Dr. Mahapatra in establishing the health university in the state, his initial vision of the institute leadership was in the form of university structure, which has the Vice Chancellor and the Registrar at the top. Thus, the role of the President was conceptualized like the Vice Chancellor, and the role of Director was conceptualized as something more than the Registrar in the sense that as the head of the institute, the director would also be a full member, and member secretary of the executive council. The initial vision for the IHS, and that vision is still alive, was not only of developing health research institute but also of developing the discipline of health system research and public health and

for that take up functions of public health education. Dr. Mahapatra said that "my vision of IHS eventually was that it will develop as a university campus".

In line with this vision, the initial effort was also concentrated on reaching out to the larger research community and to get it interested in health system research. Thus, in the first proposal to the Ford Foundation in early 1990s, the IHS made provision for the establishment a journal of health system research or public health. This of course did not work as Indian laws do not allow the foreign funds for the registered journal.

VIII. 1 - Scope:

The work of the IHS is clearly focused on the health system, health policies and to lesser extent on some determinants of health. However, the constitution of the IHS does provide cope for its involvement in broader development issues in future.

Two decades of development – a long view:

In terms of functional development, the last two decades of the IHS could be viewed in five phases: The first phase of three to four years (1991 to 1993-4) was primarily of voluntarism and in the process, create space for an organization. The second phase (1994-5 to 1997-8) was that of struggle to give a formal shape to institution. The third phase (1998-9 to 2002-3) was that of rapid expansion to operationalise the vision of establishing it as public health training institution. The fourth phase (2003-4 to 2008-9) was that of set-back to the expansion plan, the slump and the revival of the institution. The fifth phase (2009-10 onwards) has begun with a plan to put in place a campus with infra-structure, the establishment of public health training and of course more pragmatic collaborations to make the plan work.

In the first phase (1991 to 1993-4) much of the research work was supervised voluntarily by Dr. Mahapatra, except in the last one year when the IHS had a full-time director. Ten working papers were published by the IHS in this period, seven of them with Dr. Mahapatra as first author (some of them with co-authors), one with Dr. Ramana, the full-time director as the first author and the remaining two being the proceedings of the meetings organized by the institute.

Three papers were also published in journals – two in Indian journals and one in international journal.

In this phase the main areas of interests of the IHS in the public health research started taking shape. Clearly the topics examined were the health service financing – the state and the voluntary sectors in particular, the research in disease condition like asthma, research in the health service system of the state, and above all the first foray to explore the field of herbal and traditional medicine and medicinal plants by organizing a seminar on the subject.

In the second phase (1994-5 to 1997-8) was mainly supervised by a full-time director. The IHS did not publish any working paper in 1995. In 1996 and 1997 (perhaps up to first half of 1998), eight working papers were published. Four of these papers have the then director Dr. Alex George as first author (some with co-authors) and the remaining four are institutional publications being technical note, database and baseline and exploratory surveys.

In this period, more work on the health system was carried out, with studies on hospital accreditation, hospital autonomy in the APVVP, patient satisfaction surveys, preparation of the health institutions data base of the state, quality of reproductive health services and health status surveys. In this phase the IHS also did work in Mauritius health systems.

The third phase of the IHS (1998-9 to 2003) was evidently the phase of rapid expansion. This was the time when Dr. Mahapatra joined the institute on deputation from the government as the direct head of the institution, acquired a big office space, instituted training programs including a post-graduate course in health administration and recruited several faculty members. In this period 34 working papers came out. Of the 34, Dr. Mahapatra is first author for 27 (some of them co-authored with others), in one he is third author, one is document on the standards for reproductive health brought out by the institution and the remaining five papers are authored by the consultants and the faculty.

All five books published by the IHS were also brought out in this period. Dr. Mahapatra is first author of four of them, while the fifth is the report of meeting organized by the IHS. In addition, from 1998, the IHS also started publishing reports of the projects done by it. 23 reports of the projects or studies were also published in this period. In 11 of these reports, Dr.

Mahapatra is the first author. Seven of these reports are in the institute's name without any author listed, while the remaining five are authored by the faculty and consultants. The publications in the journal and in books as contribution of chapters also increased – eight such papers were published in this period.

It must be kept in mind that the increase in the number of publications by the IHS and in the journals, some of them were based on the research conducted in the earlier phase, while some were based on the work done by Dr. Mahapatra while he was studying in the USA. Nevertheless, as compared to the first two phases the research output was extra-ordinarily high in this period.

The health policy and system research contribution in the third phase: From the number of publications and more importantly, the number of initiatives taken by the IHS in this period, this phase was the golden period of the IHS. From the information gathered by us from the BoG members and the staff, it is clear that the IHS made its presence felt at the state, national and international level in this period. A brief account of some significant work carried out by the IHS in this period is given below.

International level: The IHS made a significant contribution in the area of burden of disease methodology. While the IHS was already involved in conceptualizing this work before this phase began, important part of the work was carried out and published in this period. The IHS undertook the task of community based surveys to estimate the health state valuation or disability weight that is essential for measuring the burden of disease in a country. For this work the IHS collaborated with the Administrative Staff College of India and conducted one of the earliest burden of diseases studies.

The second work of importance in this period was development of sampling design for the health system responsiveness survey of the WHO. The IHS developed the sampling design for India and Andhra Pradesh, and the same was shared with the WHO, which used it or recommending sampling design for other countries.

National level and contribution to other states: The IHS worked on the cause of death statistics of the country and published two papers in the journal. This work attracted the

attention of the Registrar General of India, and triggered of more studies on the SRS (Sample Registration System) – based cause of death program and the statistics. Another area that the IHS impacted at national level was through its work at international level on the burden of diseases. The Indian Council of Medical Research (ICMR) sent its scientists to the IHS for training in the burden of diseases methodology. Such recognition of the IHS by the ICMR was very important achievement of the institute.

At the request of the Ministry of Health and Family Welfare, the IHS designed a family health insurance policy in 2002. This policy generated lots of debate within the ministry, including a workshop where it was discussed, but the government did not act on it. Presently the government of India and different state governments have come out with several insurance policies but none is in line with the one recommended by the IHS. According to Dr. Mahapatra:

"Sad thing for IHS is that the government of India has not yet accepted the policy or the plan that IHS recommended. Rather government of India and the state governments are adopting health insurance policies which are to the detriment of the long-term health of the health sector....long-term financial health of the health sector. But IHS has made a significant contribution in the fact that this policy that is being pursued today by the government of India is not due to lack of any access to an appropriate proposal. It is despite an appropriate proposal"...

In 2003 the IHS organized a meeting and also prepared a sampling design for the prevalence study of the HIV in the country for the National AIDS Control Organisation (NACO). The development of methodology for such a survey was done by a consortium and that methodology was later used by the third National Family Health Survey to estimate the HIV prevalence.

Another are of interest of the IHS has been the health informatics. It commenced its work in this area in this period and set up training programs. The IHS took membership of the HL7 organisation hosted by the Duke's university, USA, and started providing training in the HL7 to software developers in the country for modernization of the hospitals and health care institutions. About 100 persons were trained in this period.

Lastly, the IHS also made forays in other states – Maharashtra, Madhya Pradesh, Orissa and Gujarat making some contribution in the health system development work there.

In Andhra Pradesh: The IHS did work on several projects for the state government. One area was work on specific diseases. Two manuals, one for malaria and another gastro-enteritis control programs were commissioned by the state government. Two other diseases on which research was done were Tuberculosis and HIV.

The IHS also took ahead its work on the health service system. Several surveys on patient satisfaction in the state hospitals were carried out, contribution made in the management of hospitals, including in the task of computerization of the Management Information System. At the same time attention was given to the private sector in the state, particularly on the issue of accreditation of private hospitals. Similarly obstetric care at a district level was examined and research on reproductive health care was taken up. This component also included training of the medical officers and auxiliary nurse midwives from primary health centre. In this period the IHS also worked on the essential health research issues by doing research on the priority setting in health sector.

As mentioned earlier, the field work for the national and international level contributions in burden of diseases, causes of death statistics and health responsiveness projects was conducted in Andhra Pradesh.

The fourth phase (2003-4 to 2008-9) began disastrously for the IHS. The relatively big expansion of the institute in the previous phase could not be sustained due to setbacks. The training for PG course in health administration nose-dived and the institute was forced to close it because it could not obtain recognition for the course from the university. With that went the students. Dr. Mahapatra's tenure for the deputation got over and he went back to his government job. The institute could not sustain financially and started defaulting in salary payment to the staff. So the faculty recruited for the expansion left one after another. The institute was burdened by the debt as it had to clear the salary bills of the staff that had left.

This is clearly reflected in its research outputs in the years 2004 and 05 – only three reports and two working papers were published. But the new director also began revival from the year 2004 onwards, and so the institute showed markedly improved research output from 2006. In 2006 it came out with eight research report and five working papers. This revival sustained thereafter, with eight research reports getting published in 2007 and 2008. However, the reduced faculty strength overburdened the director, resulting into no output in terms of working papers in those two years.

However, in this period some new area of work got added. First of all, it entered into collaboration with the Metropolitan Water Supply and Sewerage Board to establish water testing laboratory. This not only opened up a new area of work on the water supply and water born diseases, but also created possibility of some income generation for the institution. In addition to the laboratory work, it also involves work of looking into the access to the safe drinking water in the under-served urban areas where the poor of the city live.

The work on the HIV was expanded with work to assess the social context of the HIV program and also the institutional assessment of the program. Another addition was examination of the epidemiology of the road traffic accidents in Hyderabad.

The work on the health care system and health financing areas was continued with, and it carried out some significant research in those areas. The IHS did assessment of critical gaps in rural health care system in Andhra Pradesh and was also involved in training health workers in the rural health care. It also prepared a district health plan for one district of the state.

In the health financing, it worked not only at the state level, but also did work on other states and at the national level. The most important of its work was on the national health accounts. It first undertook the preparation of the Andhra Pradesh state health account and then it was followed up with the preparation of a manual for the National Health Accounts for the WHO. It also prepared medium term expenditure framework for Andhra Pradesh, Madhya Pradesh and Orissa. Another notable work in this field was on the health financing and expenditure on the non-profit sector in Andhra Pradesh.

The course – "Advanced Studies in Public Health": As mentioned earlier, this one year course, extended to two years, was commenced in the previous phase of the development of institution (2002-04). The establishment of this course much before all formalities for the recognition of the institute and the course by the University as well as the state government remains somewhat unclear to us. What is clear, though, is the fact that establishment of such course falls within the objectives and mission of the institution and objectively, there was and there is a great need for the capacity building and production of people trained in high quality people oriented public health. However, its timing and massive investment, so much so that it caused a financial crisis for the institution are difficult to issues to understand in the history of the IHS.

The former director of the IHS who had to bear the brunch of setback at that time explained that they knew very well that for three major reasons there was a likelihood of delay in getting the University and government recognition:

"We had always expected that the process of affiliation would be difficult mainly for three reasons. Firstly, all other professional courses have central regulatory bodies which specify requirements for affiliation as well as syllabus. It is then easier for the University to determine whether an applicant meets the necessary requirements and accordingly take a decision to affiliate the institution. However, in case of public health there is no such body in India which meant that University would have to first develop guidelines and rules for the affiliation process. It is very unlikely that the University would take the initiative to do so in the absence of a sustained effort from IHS. Secondly, as in other States health and related subjects fall under the purview of the University of Health Sciences in Andhra Pradesh. The key decision makers in the University are of a medical background and who had so far only affiliated only medical and paramedical courses. We were apprehensive of how we could effectively communicate the need for a multidisciplinary course open to non-medical graduates also. Thirdly, the masters program we had developed was structured on a credit and semester system adopted by central universities in India as well as international universities. The program had other innovations with regard to selection of students and mode of examinations which were different from that adopted by the University."

Yet, the course was established and students recruited before getting the clearance from the appropriate authorities. As expected, the long delay did occur. The expectation that once such recognition was there, additional funds will be raised from various sources, including fees from students, could not materialize. The institute was forced to discontinue the course and wait for the next opportunity to launch it.

However, the key people involved in this endeavour, the then director and present President of the institution, and the former director who succeeded him, consistently defended the decision for the establishment of this course. While the GoB members we interviewed did mildly state that they went ahead of time or showed some hurry, none discussed in detail about that decision.

In our mind there is no doubt that establishment of this course was pre-mature, more so from a seasoned civil servant who understands the uncertainties of the speed with which various arms of the government and university function. However, the expressed ambiguity around the decision could be due to two reasons. First, the exercise carried out in establishment of the course – the development of course curriculum, methods of assessment, identification of the faculty, etc etc played an important role in obtaining the clearance from the university and the government later on. Besides, that also showed its seriousness for the government to allocate land to the institute. Second reason is the institutes decision to establish the course now with university and government recognition. When such process of establishing the Masters in Public Health course is on, the institute would like to look back at the earlier endeavour as as something done in preparation of the one that is now actually getting established. The former director of the IHS thus said that:

"I believe that in the long run investing our time and resources in the Advanced Studies in Public Health would bring significant returns to the Institute. As I mentioned earlier, if it was not for the program we would not have come to a stage where we have an affiliation to start the MPH program. In addition to fulfilling a major objective of the Institute, I believe that the MPH program is the key to the Institute's sustainability. For the Institute to grow beyond the current scale of operations and be sustainable it will require significant support from the government and other donors. Such support will not be forthcoming unless we are able to

demonstrate requirement of large scale funding as well as its potential outcomes. In the current scenario the MPH program is an excellent vehicle to seek such support. The affiliation for MPH played a significant role in getting the Institute 16 acres of land from the government. The availability of land plus MPH affiliation along with the Institute's track record has tremendous potential to open further avenues of funding. If such funding materializes it is a key step to sustainability of the Institute as it broadens the financial base of the Institute. In addition to fees generated through academic programs, faculty put in place for academic programs will also be able to generate resources through sponsored research. I agree that it is an extremely challenging task for which the Institute must plan its strategy very carefully."

The fifth phase of its work development has just began from the later part of the 2009. While the new director took over at that time, the BoG also moved forward to operationalise its vision of having a campus of the institution. It negotiated and was awarded land at concessional price by the state government to build its own campus. It has also entered in to collaboration with the large non-profit organization, the LV Prasad Eye Hospital for starting the Masters of Public Health degree course. The University approval for beginning such a course has already been obtained.

Indeed, there is support from the government for establishing the MPH program by the IHS. The principal secretary state the following:

"In fact today you will be quite happy to know that we are amending the service rules in the state that if somebody wants to become district medical and health officer or additional district medical and health officer, he must or she must possess a master's degree in public health".

He further added that as the medical officers are allowed to move in the hierarchy, there will also be a need to chart out the growth path for the other health workers so that they could, after receiving relevant training, also move up in the hierarchy. So their training could also be taken up by the organization like the IHS. He stated that:

"So if I don't give financial support to institutes like IHS, at least I insist my fellows to go for a training like this and provide opportunities in their jobs to go for a training program, I am sure they (i.e. IHS) will come with tailor made courses where individual can work for 1 month, go for 1 week training, go back again for 1 month work, go back again for 1 week training and gradually upgrade his own skills".

So clearly, the next step being planned by the IHS is in line with the need expressed by the state government.

Indeed, this new endeavour will bring new challenges for the IHS – both in terms of raising finances as well as recruiting competent faculty to run the public health education program and also to lead it research work.

VIII-2 Services provided

From the above narration of the two decades of development of the functional program of the IHS, the range of functions taken up by the organization is as follows:

- **a. Conduct policy-relevant research:** The health policy research constitute a bulk of research work done by the IHS. It must be kept in mind that often the health policy research or contribution has emerged from the need expressed by the state or from the evidence gathered while doing operation research in the system indeed, the very foundation of the IHS was laid for doing the operation system research for improving the management of health sector.
- **b. Identify and synthesize policy relevant research:** This kind of work is attempted, but not on regular basis, at least in last five years.
- **c.** Conduct evaluations: Although some work for evaluating certain components of system was taken up in the first decade of its existence, it was more embedded in the system research rather than systematic evaluation plan. This component of work got impetus in last the last decade when systematic work to evaluate the HIV program, access to safe drinking water, rural health system evaluation etc were taken up.

- **d. Conducting and/or commissioning systematic reviews:** This work is not attempted so far.
- **e. Convene expert meetings:** In last five years, such expert meetings were rare, or at least no documentation of that is available. Prior to that there is documentation of some expert meetings e.g. the meetings to design methodology of the population based survey to estimate prevalence of the HIV, meeting to discuss strategy for the health sector development in the state, etc.
- **f. Organize conferences, seminars to stimulate debate:** In last five years there have been very few such regular activities, barring the organisation of meetings to disseminate and/or discuss the findings of some of the studies conducted and training workshops. Prior to this period, there is documentation of organisation of meetings to disseminate findings, seminars and training workshops and importantly a series of public lectures by the national and international visiting experts.
- **g. Provide policy advice:** Since the organisation works closely with the state government, the director and president are often called upon by the state for policy advise or discussion on issues pertaining to public health. However, the organisation does not produce specialise policy briefs but when required, makes presentations.
- **h. Training and capacity development for policy makers:** The bulk of training done by the IHS is for health service managers and health workers, not the policy makers.
- **i.** The products produced by the organization: As explained in detail in the next section on the publications, the products of the institute are (1) Research report, (2) Working Papers, (3) Papers published in journals and books, (4) Manuals (for disease control programs, National Health Accounts etc), (5) Books, (6) dataset and (7) Compilations.

However, it may be noted that production of products is usually determined by the project, availability of the faculty and finances. Thus, the first two products are regular – as they are often inevitable outcome of any project – the rest are not brought out regularly.

As explained in the publication section, many reports do not have executive summary, summary of take home messages and tools for application. No separate versions for different users were available. All reports are full reports with notes and references.

VIII-3 Quality Assurance system for organisation's products

Barring the third phase of the IHS's development, the institute did not have more than one or two researchers – one of them always being the director - who could qualify as the faculty in true sense of the term. Thus, a faculty committee in true sense of having highly qualified researchers does not exist in the IHS at present. Besides, the bulk of the publications of the IHS are self produced. So the system of independent review by the expert referees for maintaining quality of publication becomes a critical one.

However, the institute has some qualified subject experts in the BoG and of them, evidently, the president is able to devote the maximum time for reviewing manuscripts for the publications. Others are called upon to do such work as per needs. Thus, while a strict system is not in place, I could gather that there is informal mechanism existing for the review of the products before publication.

It may be noted that most of the publications are products of research projects sponsored by the government, international and private agencies. One may assume that those clients may have a system for review in place before accepting the product of the institution. Particularly the clients or sponsors such as the WHO, DfID etc are more likely to have such a system, though in my interviews with clients, I could not find evidence of the government sponsors having any such system in place. However, all clients interviewed expressed marked satisfaction with the quality of the products.

Dr. CK George, the former director of the IHS, acknowledged that for an institute positioning itself as academic public health policy research and education, the lack of sufficient number of publications in the peer reviewed journals was a definite short coming that needs to be

overcome soon. He was also very forthright in acknowledging the deficiency in the quality assurance system and said that such formal system must be established soon. He said that:

"I understand dangers of self-published reports and not having good peer review system. We do not have a formal quality assurance system at the institute. This does not mean we do not strive for high quality, but only that internally this is done more informally than having a working system. We publish reports that are finally accepted by the sponsor of the project. Some sponsors have very good quality assurance system of their own. For instance, the DFID and WHO have good system of peer review, so all studies supported by them went through that system and we got opportunity to revise reports based on feedback received. Even NACO has good technical groups, and the review by them helped in maintaining high quality of reports. On the other hand, the projects from the government departments did not have benefit of sponsor initiated peer-review. But I think it would help the IHS a lot to establish its own quality assurance system as that would ensure uniformity in quality irrespective of the sponsors".

VIII-4 Influencing policy

As a health system and policy research institute the IHS is expected to have its own independent strategic plan for research. Such a plan should be based on the evidence independently synthesized by or commissioned by it for the areas and topic of health system and policy research. And the plan should also include the strategies needed for the use of findings of such research for influencing policies. Such a plan could provide some objective basis for the priority setting of health policy research by the institute. The IHS, as testified by the director, president and the BoG members, is aware of the need to formulate such a plan for work (which in the IHS case includes research, training and advocacy) as well as for the long term development of the institute. In coming time it will be making endeavors to have such a plan in place.

Mandate or how the institution is positioned:

The former director of the IHS explained the mandate of the IHS in the following words and also tried to dispel misconceptions:

"Since the IHS is a non-government organization (NGO), sometimes there are expectation that like other NGOs, it would be involved in intensive advocacy and campaigns for various health policies – for the implementation of the existing ones as well as for persuading the government to adopt new ones. The IHS is not positioned primarily as a health policy advocacy institute, but as a public health research and education institution that involves itself in generation of evidence that could be used by the policy makers in formulating new policies, for operationalisation of the existing policies, and for improving implementation by undertaking monitoring and evaluation. While the IHS does undertake, when necessary, intervention through media or by using other means to create public opinion on various health issues, its strength is in interaction, assistance and generation of evidence for the strengthening, reforms and adoption of new policies".

This indeed makes it all the more necessary for the IHS to independently formulate its own priorities in health policies since it survives primarily on the grants received from the government and other donors for projects.

Ensuring policy relevance of institute's work: A bulk of activities conducted by the IHS has emerged from the needs expressed by the government, and/or the government initiative in collaboration with the multi-lateral or bi-lateral donor agencies. This is one of the reason why these agencies are the chief funding source for the institute – for their health policy needs they require good research done, and the IHS taken up this work for them. So in a way, the policy relevance of the IHS's work in several areas is determined by the government's needs and initiatives in health policy.

But this is not the full story, as there are few initiatives in health system and policy research emerged from the policy research interests of the institute and the private/public funders matching at a given point of time. The work on private sector, the quality standards for obstetric care, the financing of NGO sector etc seems to have more institutional interest or the researchers' interest at a given point of time.

It may be noted that for an organization without core-funding support to provide space to take up research of the importance it considers the best for the policy initiative, and having critical dependence on the external project based grants and consultancy; it is difficult not to take some research work that it may not consider so relevant at that point of time. This situation leads to two phenomenons: (a) One piece of research may not be sufficient to influence the policy, more work may be needed in the area to make impact on the policy. That means the institute may have to develop a long term program to influence a particular set of policies, and break up the program in a series of projects to build credible evidence. Thus it may appear that each project is stand alone one, but in reality for the institute each one generates a series of cumulative evidence that could be more powerful tool for influencing policy. Such work of synthesizing findings of its own projects and the work of others in a particular field also demands time space and resources. So without such funding available, one would find breaks in pursuing the health policy area of one's choice. This is very evident in the case of IHS. Perhaps the only area that is consistently pursued is the research on state health financing, and that has found some synthesis in preparing the state and the national health accounts. (b) In the work of institute one time research on a topic, not pursued thereafter, keep coming up very often due to the compulsion to take project for the financial needs of the institute rather than to operationalise long term plan of influencing policy in that particular area.

Contribution of the IHS in health policies:

In India, there are very few formal health policy documents around. For instance, after independence in 1947, the first formal health policy statement by the central government was made in 1983. Thereafter, only in 2002 the central government came out with the formal health policy document. However, that does not mean that the health policy decisions are not taken by the government from time to time – they are, and they could be found in the budgetary allocations, in changes in the services provided, in program components of the services, in regulations and laws enacted and also in the decisions not taken on some crucial issues by the government.

However, it is also clear that most of the state governments in India do not have their own formulated health policies. Many of them also do not have longer term plans, at least, not in a documented form.

The following information on the contribution made by the IHS, particularly in last five years, was prepared with the help of Dr. CK George, the director of the IHS at that time.

Dr. George described three major ways in which the IHS provides inputs to various aspects of health policies at national, state (Andhra Pradesh) and other states levels: (a) By involvement of the senior persons of the IHS in the policy making bodies (b) The inputs provided by him and other researchers of the IHS by providing technical assistance to government agencies in operationalisation of policies and in developing organizational policies' (c) By undertaking research on the projects from government and other agencies to generate evidence, evaluation studies, training etc.

Health financing:

(a) National Health Accounts: The analysis of government expenditure on health in Andhra Pradesh by IHS happens to be one of the first contributions towards building up of state health accounts in India. A key finding of the study was that the resource allocation for public hospitals was skewed towards urban tertiary hospitals with first referral (district and subdistrict level) hospitals receiving inadequate attention. This work provided inputs to the World Bank AP First Referral Health Systems Project as well as to the National Macroeconomic Commission on Health of the Government of India. Subsequently the IHS received the WHO support for developing a manual for the National Health Accounts for standardization of health accounts throughout the country (b) **Financing of non-profit sector:** A national survey on health expenditure by NGOs conducted by the Institute, the first of its kind in the country, fed into the NHA India estimates published in 2005. (c) Medium term expenditure framework: The Institute assisted three State Governments- Andhra Pradesh, Orissa and Madhya Pradesh, in developing medium term expenditure framework (MTEF) for Health under the DfID supported health sector reforms. The strength of the IHS in this work was that it was not an academic work, but directly linked to the way the state budgets were designed. By having this link it made it possible for the government officials to understand the contribution that such medium term expenditure framework can make in operationalisation of policies (d) **Health insurance:** The Institute was commissioned by the Ministry of Health and Family Welfare to develop community health insurance based family health protection plans for consideration by the government of India. A benefit package which included comprehensive ambulatory primary care and access to first referral hospital services has been developed by the Institute. The plans would mostly use private clinics for the ambulatory care and public or nonprofit providers for hospital services Dr. George believes that "The IHS produced a very good work on health insurance much before the new methods of insurance

were adopted by various central and state governments. However, unfortunately, it hasn't been given the kind of attention it deserves by those state bodies".

Contribution to health system strengthening and to organizational policies:

(a) Hospitals and Primary Health Centres: According to Dr. George, "the IHS has done a series of studies on the functioning of state hospital sector, including patient satisfaction surveys, and also on the Primary health Centres – their mapping, location, structures, monitoring etc. The evidence generated by them and through the interaction with the concerned departments of the government have contributed in evolving or modifying various organizational policies of government for those sub-systems". (b) Human resources for the rural health care: Dr. George explained that the IHS "did significant work on the human resources, particularly on doctors, at the PHCs. The Institute was commissioned by the Department of Planning, Government of Andhra Pradesh to assess inherent and operational gaps in the rural health care system of the State. A key finding was that addition of a second MO post to existing single MO posts would be a cost effective intervention to improve availability of doctors in the PHC. However since the sample size of the study was limited, a study of a larger sample was warranted. IHS is currently doing the follow up study which will generate evidence on a number of parameters important for developing policies related to related to human resource planning and management". (c) National AIDS Control Organisation: The IHS carried out an institutional assessment of the National AIDS Control Programme at the national, state and district levels. The assessment provided recommendations for organization structure and staffing of key entities at the national, state and district level. In addition, the assessment also recommended mechanisms for convergence of NACP with the NRHM; NACP-RNTCP convergence; Partnerships for capacity development and program support; Public-private partnerships for service delivery; and a governance framework for the NACP.

Relationship with policy makers: Indeed, in this area the IHS scores the best. It has strong connection to the higher levels of the state leadership through the members in the GoB, and at the same time, it is able to work collaboratively with the government officials as it is doing lots of work with them. As a principle, the IHS ensures that when a project is taken from the government, it involves some key actors from the government when it is designing research.

For instance, a client, the planning department of the state government had the following to say:

"Actually the way they have done is very encouraging. Whether government accepts it or not is different thing but we have already discussed with highest officials, madams, secretaries, etc. They had formal discussions with the government also. The way the study is done is quite nice. The objectives they have studied are also very acceptable to us and even to the health department, that is, to the principal secretary of health also. While formulating designs as well as the schedules, and after the sampling; on couple of occasions they had come and interacted with us to know whether they were going as per our requirements or not.

In between every quarterly, my participation was there. And accordingly they reviewed again the format of the schedule. .. Keeping our suggestions in view, they used to revise and again, if necessary, they went back to the PHCs and again collected the desired information. It was definitely useful. The survey was useful...and the findings are also encouraging".

Outreach and communication: Being a small institute, it does not have a separate unit for communication and out-reach. This function is usually carried out by the director, sometimes by the researcher who did the research and when required, by the president.

Relationship with media: In the absence of organised system for out-reach and communication, the IHS does not have a very organic connection and relationship with the media to publicise its work. At the same time, a number of times it has also invited media and interacted with it.

While discussing this issue with the staff of the institute I found that interaction with media depended a lot on the time available to the director who is usually loaded with the research work being the sole senior faculty of the institute, while the president has certain limitations on talking to media, particularly if the issue has potential for controversy, as he is a part of the government. The director in last five years, as per the staff, did try to inform media on certain findings of research. Besides, he also provided his opinion when contacted by journalists on

the public health issues being covered by the media. In interviews with the staff, GoB members and clients, we had a range of responses on this topic. Some of them are worth quoting in order to understand the complexities involved and the limitations of the institute like the IHS.

A client had a very negative response, saying that "I don't think it has gone beyond NGO circles because they don't get that much of media coverage". This is partly true in the sense that in the media in Hyderabad city where one expects the IHS to play some role in forming public opinion, there is no regular coverage of its views on health policies. However, this is only partly true, as one staff member put it:

"No. I don't think we do (interact with the media regularly). I don't have that much idea on what happened in the past. But, for example, when we started our public health lab, we had called media. We also called an official from government of India. That people can make use of this public health lab. So we went to the media, we called the media and gave the publicity. That is one of the services".

An executive council member, who knew more about the work of the IHS in this regard, said that:

"We used to call media when some dignitary to be there and expert coming from either foreign expert or Indian expert, coming and speaking on a theme. This type of thing (organizing press conferences) was there earlier, of late it wasn't there. Particularly swine flu time there was no director, George had left and Surendra had not yet joined so no leader was there in person but that is what we would like to do and we have been doing. As long as George was there you would find every month some statement from Director, IHS on on-going issues".

The IHS also had its share of some controversy in media. That happened when there was an ou-break of water-born diseases, and it was called upon to do an investigation by the water board, which is its main client for water testing at the public health laboratory. The investigation, including testing of water and interviews with people and observations, found some gross irregularities in purification of water. Indeed the institute report to the water board

provided all facts as they were found. However, the media picked it up. A member of the staff explained:

"The press had approached us and we told them what had happened. We explained that we had given reports to Metro Water Board. Yes (we told them that the reports we gave showed no chlorine) Even Times of India we have given (reports). Yes, (the individuals who were negligent in their duties) were suspended.

But what we tried to say was that we were not enemies of the Board, we were only trying to help the public. We were trying to help because we all are working for the same purpose. We just try to say...we don't want to fight with you...we need their support, some kind of guidance, without their support we can't go forward. When there is some chief general manager coming, we give those reports to help, that these kinds of gaps should not be continued and should be rectified, such report your people may not give you, your people may not come to report at the senior level. Maybe the problem is hidden/closed at the ground level itself, thinking that why I should take the risk of revealing, I will be asked for this. Here we are giving the information and you (authority) can take the action straight way".

This episode is a very interesting example of what the research findings could do to make some corrections in the system. At the same time, since the institute has to work with the system, it is constrained to play a role less of an activist than that of a constructive reformer.

A member of the BoG summed up issue involved in interaction with media in a thoughtful manner:

"This (major campaign in media) was done actually in 1999, I think. We had a major state level stakeholders workshop where govt of AP, Media was there, Private sector was invited. Funding... I say is a major constraint (for a long-term campaign and follow). For example we set standards for everything and then we asked (a funding agency) to fund further so that we can implement these standards in private hospitals...we didn't get further funding. (so there was no follow up of the media work).

"We were almost not very media savvy. We had I mean...perhaps we had some interactions with media and IHS has come in newspaper and then there were some brawny statements written by the press and then we had to answer back and then you know because we were working with APVVP, it was with govt institution. But most of these publications were available for sale. Somehow something was misquoted and then we had to reply back that this was misquoted in the newspaper. Then you know how media reacts immediately, they actually started writing very bad about IHS. Then we revert back that whatever they have written was wrong.....you know the publications are available and you can buy the publication from front office. So media sometimes totally put you off. But again, I mean as you said, you always have to be there because you are in public health and you will have to....."

So in coming time in order to highlight its work and also to create public opinion for whatever health policy changes the IHS would like the government to initiate, the IHS will be required to work on healthy relationship with the media. Of course there are complexities and problems, but in the democratic system of the country, the public opinion plays an important role in moving the policy initiatives forward. Besides, it is an ethical obligation of the institute to help the media in properly using the research evidence to shape correct or evidence-based public opinion. This needs to be a part of the advocacy strategy of the institution.

Impact assessment of products: This is a very difficult area. Not only the IHS, but most of the institutes involved in policy research do not have a systematic method to assess the impact of its product. There are few pointers used, though. Such pointers, howsoever anecdotal, are also used by the IHS. For instance, the discussion generated in the policy circles, academic and opinion makes by the findings of research could be one way of getting an idea of impact. Indeed, if any formal policy is announced and some of its components are as per the recommendations of the institute's research, there is obvious connection to the impact of the product.

To strive for more policy impact:

The former Director of the IHS, Dr. CK George said that the institute proactively developed some of its programs and used its position to constructively suggest reforms. However, on balance he found that institute was more reactive than proactive. In his words:

"My feeling is that in the health policy sphere, the IHS has been more reactive than proactive. The ideal situation would be the institute looking at an conceptualizing on the health needs of people of the state and coming out with policy recommendation for which it could seek public and state support. That way we could set the agenda for the government".

IX: Publications (Published document review)

Working Papers and Reports: The IHS has a well-organised publication policy in place. Most of its publications are self-produced. In a year after its establishment in 1990, the IHS started its Working Papers series. Since 1991, it has produced 65 Working Papers (or 3.42 papers per year). As the institute took shape and started undertaking systematic project and consultancy works, the outcome of research was published as reports. In 1998 it commenced its Reports publication series. In last 12 years, it has published 49 reports (4.1 reports per year). The publication quality of all Reports and Working Papers is excellent, with good quality papers and printing used, so much so that even the copies of those published over a decade back still look very elegant.

Books: Interestingly, the IHS also published several books, the most productive years for the book publishing being the years 2001 and 2002 when it brought out five books. Two of the books, one on private sector and another on burden of diseases, are voluminous and must have necessitated good investment. After 2002 the IHS has not published books, though some of the reports and one recently published manual (analysed in this report as a part of the report series) for preparation of the National Health Accounts have book-like quality of publication.

Dataset and compilations: In 2002 the IHS began its Dataset series. This series emerged from various works undertaken by the IHS, the data of which were preserved and periodically updated. However, the data sets were done in only two years, 2002 and 2003; thereafter the there is no addition in the series. In those two years, six data sets were made ready and also made available, albeit on payment of certain fee, in the public domain. Thus, the IHS has data sets on causes of deaths, child labour, district family health survey, AP health responsiveness, AP health state valuation and the water quality in AP. Similarly, in 2003, the IHS decided to commence Compilation series. In that it brought out two compilations – the extracts from the Registrar General of India's publication providing sources of population, mortality and fertility data; and second was compilation of data from the Management Information system of the AP's Primary Health Centres. However, there is no addition in this series after the year 2003.

Published documents of last five years (2005-09):

We reviewed publications of last five years, from the year 2005 to 2009. Of various

publications series brought out by the IHS, as reported above, no addition has taken place in

the books, data set and compilations. So we went through only the publications of Reports and

Working Papers. In addition, we were provided with a list of publications arising out of work

at IHS other than those published by IHS. However, we did not have a copy of those

publications so we have made only broad comments on it separately.

Numbers: In last 5 years, the IHS published 18 reports (3.60 reports per year). This is

relatively lower output as compared to the preceding seven years (1998-2004) when 31

reports (4.43 reports per year) were published. On the other hand, the number of published

Working Papers has come down sharply, with only six of them being published (1.2 per year)

as compared to 59 in the preceding 14 years (4.2 per year).

It must be noted here that number in itself is not the full story – the publication output is

always determined by many factors, discussed in detail earlier in the report. To recap, some of

these factors are the scale of operation of the organization coming down as compared to the

preceding five years, the number of senior researchers available to convert data collected as a

part of the project into well-researched working paper, the time available to researchers

between two projects for preparation of publishable papers, the research work that is not

directly connected to a consultancy or grant, and so on.

With small base of researchers that the IHS has had in last five years, particularly the fact that

it had only one senior researcher (the Director) while other support from seniors came from

outside the full-time staff, in terms of numbers the performance of the IHS is commendable.

In terms of sheer number of research reports prepared, it is clear that the existing staff,

particularly the senior, were over-loaded throughout the period.

Classified summary of publications (2005-09): The publications of the last five years may

be classified as under:

1. Health financing:

Reports (5),

Working Papers (2)

2. Health System Governance:

Reports (2)

74

3. Service Delivery: Reports (3), Working Papers (1)
 4. Disease Specific Analysis: Reports (5) Working Papers (3)

5. System-wide Analysis: Reports (1)6. Others: Reports (2)

From the above it is clear that the large amount of research work undertaken by the IHS in last five years was on two subjects, the health financing and disease specific analysis. It must be kept in mind that the disease specific analysis reports are predominantly analysis and evaluation of the disease specific programs – so they could be classified also as a part of the research on service delivery subject. So it would be appropriate to say that bulk of the research publications deal with the health financing, general and disease specific service delivery and analysis of diseases.

The subject-wise information on each publication with comments from us is given in the table below:

All Publications: 2005-09

	1. Health financing	Method	Clarity	Executive
				Summary
	Reports			
1	RP33/2006 - Health Financing and	Postal	Useful report as there is	No
	Expenditure of the Non-Profit Sector in	survey	scanty literature in India	
	India, Report Prepared for World Health		on financing and	
	Organization. C.K. George, N.S. Reddy		expenditure on health by	
	and G.S Pattnaik pgs 55		the non-profit sector.	
2	RP38/2006 Medium Term Expenditure	Secondar	Applies National Health	No
	Framework for Health in Andhra Pradesh.	y data	Accounts methodology	
	Report prepared for the Department of	analysis	and analyses last five	
	Health and Family Welfare, Government		years' state budget	
	of Andhra Pradesh C.K. George, pgs 100		documents. Costing of	
			medium term health	
			strategies also carried	

			out.	
3	RP42/2007 Medium Term Expenditure	Secondar	Applies National Health	No
	Framework for Health in Madhya	y data	Accounts methodology	
	Pradesh, C.K George, Subodh	analysis	and analyses last five	
	Kandamuthan pgs 182		years' state budget	
			documents. Costing of	
			medium term health	
			strategies also carried	
			out	
4	RP 47/2008 Medium Term Expenditure	Secondar	Applies National Health	No
	Framework for Health in Orissa. C.K.	y data	Accounts methodology	
	George, GS Pattnaik and Subodh	analysis	and analyses last five	
	Kandamuthan, pgs 160		years' state budget	
			documents. Costing of	
			medium term health	
			strategies also carried	
			out	
5	/2009 National Health Accounts:	Manual	Very useful manual for	No
	Training manual for implementation of		teaching and learning	
	NHA in India, CK George, Institute of		about how to undertake	
	Health Systems, pgs 264		preparation of health	
			accounts using National	
			Health Accounts	
			methodology. Provides	
			definitions, data sources	
			and analysis framework	
			to learn, exercises for	
			skill building.	
	Working papers			
1	WP61/2006 Trends and Analysis of	Secondar	Based on the Medium	No
	Government Health Expenditure in	y data	Term Expenditure report	
	Andhra Pradesh C.K. George pgs 56	analysis	for the state. Same data	

			of the govt expenditure	
			used. Only descriptive	
			analysis – no research	
			question posed; and no	
			recommendations.	
2	WP65/2006 Trends and Analysis of	Secondar	Based on the Medium	No
2	Government Health Expenditure in			NO
	_		Term Expenditure report for the state. Same data	
	Madhya Pradesh C.K. George and Subodh	analysis		
	Kandamuthan pgs 35		of the govt expenditure	
			used. Only descriptive	
			analysis – no research	
			question posed; and no	
			recommendations.	
	2. Health System Governance	Method	Clarity	Ex Sum
	Reports			
1	RP35/2006 Institutional Assessment of	Institutio	Useful document.	Yes
1	RP35/2006 Institutional Assessment of the National AIDS Control Programme	Institutio nal and		Yes
1				Yes
1	the National AIDS Control Programme	nal and	Provides analysis of	Yes
1	the National AIDS Control Programme (NACO). Report Prepared for the	nal and program	Provides analysis of institutional structure of	Yes
1	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization.	nal and program evaluatio	Provides analysis of institutional structure of the NACO and also	Yes
1	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha	nal and program evaluatio	Provides analysis of institutional structure of the NACO and also provides proposals or	Yes
1	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha	nal and program evaluatio	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in	Yes
1	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha	nal and program evaluatio	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as	Yes
2	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha	nal and program evaluatio	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions.	Yes
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164	nal and program evaluatio n	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions.	
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164 RP41/2007 Assessment of Critical Gaps	nal and program evaluation	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions. Useful document. It	
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164 RP41/2007 Assessment of Critical Gaps in Rural Health Care System of Andhra	nal and program evaluation	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions. Useful document. It covers infrastructure,	
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164 RP41/2007 Assessment of Critical Gaps in Rural Health Care System of Andhra Pradesh Dayakar Thota, Prasanta	nal and program evaluation	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions. Useful document. It covers infrastructure, human resources,	
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164 RP41/2007 Assessment of Critical Gaps in Rural Health Care System of Andhra Pradesh Dayakar Thota, Prasanta Mahapatra, C.K. George, NS Reddy pgs	nal and program evaluation	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions. Useful document. It covers infrastructure, human resources, operational gaps as well as community	
	the National AIDS Control Programme (NACO). Report Prepared for the National AIDS Control Organization. C.K. George, L.H. David and Kavitha Krishna Pgs 164 RP41/2007 Assessment of Critical Gaps in Rural Health Care System of Andhra Pradesh Dayakar Thota, Prasanta Mahapatra, C.K. George, NS Reddy pgs	nal and program evaluation	Provides analysis of institutional structure of the NACO and also provides proposals or recommendations in detail on structure as well as various functions. Useful document. It covers infrastructure, human resources, operational gaps as well	

Reports 1 RP37/2006 Water Quality in Reservors of Water Hyderabad (2005-06), Report prepared for the Hyderabad Metropolitan Water Survey Unsatisfactory Supplyand Sewerage Board, Government and Chlorination of water	in ds
Hyderabad (2005-06), Report prepared for the Hyderabad Metropolitan Water survey unsatisfactory	in ds
the Hyderabad Metropolitan Water survey unsatisfactory	in ds
	ds
Supplyand Sewerage Board Government and chlorination of water	ds
Supplyand Sewerage Board, Government and emormation of water	
of Andhra Pradesh. C.K. George and testing reservoirs and also fine	
Saritha K, pgs 9 the causes for such sta	te
of affairs.	
2 RP43/2007 Report of the Public Private Water Report provid	es No
Partnerships for Water Safety in sample background and terms	of
Hyderabad (2006-07) C K George and survey partnership in brief. The	ne
Saritha K, pgs 102 and bulk of it is analysis	of
testing over 5000 (2005-0	7)
water samples f	or
residual chlorine ar	nd
bacteriology.	
3 RP34/2006 - Public Private Partnerships Water This report is not on the	ne No
in prevention of waterborne diseases in sample partnership per se, b	ut
urban slums (2004-06) Report prepared survey on the water quali	ty
for The Hyderabad Metropolitan Water and survey done by the IF	S
Supply and Sewerage Board, Government testing (which is in partnershi	p)
of Andhra Pradesh. C.K. George and in slums. It provide	es
Saritha K pgs 47 information on quali	ty
of water supplied	to
slum as well as in the	ne
slum-based wat	er
sources, and al	so
analyses causes.	
Working papers	
1 WP60/2005 Quality Emergency Medical Review A descriptive pap	er No
Care in India: Challenges and using secondary date	a,

	Opportunities Dayakar T and C.K. George		makes case for	
	20		emergency medical care,	
			discusses various	
			standards that could be	
			adopted, and makes	
			some estimates of	
			human resources and	
			financing issues.	
	4. Disease specific analysis	Method	Clarity	Ex Sum
		Method	Clarity	Ex Sum
1	Reports RP32/2005 - Social Context Assessment	Qualitati	Good qualitative study	Yes
1	for HIV/AIDS Prevention Programmes in	ve	with 32 FGDs and 118	108
	Andhra Pradesh. Report of the Outcome	VC	Indepth Interviews.	
	Evaluation of the Frontiers Prevention		Covers issues related to	
	Programme. C.K. George, Kavitha		social capital, stigma	
	Krishna, N.S. Reddy and B. Srikanthi pgs		discrimination, violence,	
	139		self esteems and quality	
			and access to services.	
2	RP36/2006 Estimation of HIV sero-	Develop	This work developed a	No
	prevalence in India. Report prepared for	ment of	methodology -	
	the National AIDS Control Organization.	study	including sample size,	
	Prasanta Mahapatra and C.K. George, pgs	methodol	data collection methods	
	42	ogy	and toold and analytical	
			framework – for	
			population-based	
			estimation of sero-	
			prevalence of HIv in	
			India.	
3	RP45/2007 Outcome Evaluation of the	Qualitati	Study of Frontier	No
	Frontiers HIV Prevention Programme in	ve	Prevention Program	
	Andhra Pradesh C K George, Immaculate		sites for HIV to evaluate	

	Mary, Francis Raj, pgs 372		their outputs and also to	
			test develop	
			methodology	
4	RP46/2007 Assessment of Acute	1500	Study of gastro-enteritis	No
	Gastroenteritis Risks Associated With	househol	episodes, water use and	
	Water Quality and Sanitation in	d survey	hygiene practices and	
	Hyderabad City C K George, NS Reddy,		water quality by quality	
	Dhanraj and Saritha K pgs 50		testing of water sample.	
5	RP 48/2008 Epidemiology of Road	Secondar	Analyses trends in road	No
	Traffic Accidents in Hyderabad, India	y data	traffic accidents,	
	George CK, Dhanraj and Satish K., pgs	and	hospital data and also	
	120	qualitativ	primary data analysis	
		e	with direct observation	
		methods	and interviews.	
	Working papers			
1	WP62/2006 Road Traffic Acidents: A	Literature	Completely based on	No
	Review of Literature Satish K and	review	report.	
	Dhanraj pgs 13			
2	WP63/2006 Trends and Analysis of Road	Secondar	Completely based on	No
	Traffic Accidents in Hyderabad city based	y data	report – no additional	
	on data from the Transport Department of	analysis	work.	
	Government of Andhra Pradesh and			
	Hyderabad Traffic Police Department			
	Dhanraj and Satish K pgs 12			
3	WP64/2006 An Analysis of Road User	Qualitati	Completely based on	No
	Behaviour in Accident Prone Areas of	ve data –	report – no additional	
	Hyderabad City- based on data from	CCTV	work	
	Direct Observation Studies Dhanraj and			
	C.K. George. Pgs 05			
	5. System-wide analysis	Method	Clarity	Ex Sum
	Reports			

1	RP44/2007 District Health Action Plan for	No clear	Provides situational	No
	Anantpur District Dhanraj pgs 230	method	analysis and estimates of	
			expected performance	
			using norms of various	
			programs. Very unclear	
			in terms a plan for a	
			district.	
	6. Other	Method	Clarity	Ex Sum
	Reports			
1	RP39/2006 Report of the Advanced	Course	This is simple report of	No
1				
	Studies in Public Health Programme,	evaluatio	advanced studies in PH	
	Studies in Public Health Programme, 2003-04, C.K. George pgs 20	evaluatio n	advanced studies in PH course offered by the	
			course offered by the	
			course offered by the HIS in 2003-04; with	
2			course offered by the HIS in 2003-04; with evaluation of various	No
2	2003-04, C.K. George pgs 20	n	course offered by the HIS in 2003-04; with evaluation of various course modules.	No
2	2003-04, C.K. George pgs 20 RP40/2006 IHS Guidelines for	n Guideline	course offered by the HIS in 2003-04; with evaluation of various course modules. Detailed guidelines for	No

Some additional general comments on content and quality of publications: The reports, though many of them very lengthy, are well written and easy to read. Three reports on the state level health financing analysis are relatively more difficult to read, though. The reports based on research undertaken by the IHS provide information on the methodology employed, the data sources and adequate analysis of the data.

However, there are a few important things missing in many reports. They are executive summary (available only in three out of 18 reports) and high-lights on key findings and recommendations. Particularly while reading lengthy reports their absence becomes very glaring, and reduces their impact. The IHS should take care that they are provided upfront in all reports. It may be added that in some of the Working Papers published before 2005, the abstracts and cover pages are provided on the website of the institute.

Publications arising out of work at IHS other than those published by IHS: The list of such publications in last 20 years is provided in <u>Annexure 4</u>. There are seven such publications in last five years, while 29 such publications also came out in the period 1991-2004. The pattern here is same as in the case of self-published outputs, that is, in last five years, the average number of papers, book chapters or popular articles published in newsletters and newspapers, based on the work done at the IHS has come down to half of that in the preceding 15 years.

Indeed, these publications in the international and national journals, books and newsletters of prestigious organizations are very important. In last five years, the IHS researchers have published in the Lancet, Journal of Water and Health and also in the national financial paper like the Economic Times.

Clearly, for number of publications in last five years from the institute in the peer-reviewed journal is not sufficient and more needs to be done. Dr. CK George, the former director of the IHS, acknowledged that for an institute positioning itself as academic public health policy research and education, the lack of sufficient number of publications in the peer reviewed journals was a definite short coming that needs to be overcome soon. However, he explained that such change-over would demand what he stated earlier – the minimum threshold of senior faculty and those who could do writing. He explained further that:

"For converting a piece of research into a paper that could be sent for publication in a peer-reviewed journal, in addition to other factors I explained, demands time. We were working on multiple projects, but also writing multiple reports simultaneously. Now-adays trend is to complete research and reports in the minimum duration of time. The donors do not provide luxury of time, they want data and reports. Once a deadline is met and we start a new report, it becomes difficult to go back and pick up threads of the earlier work.

In my case, I regret not having published more during my tenure at IHS. I am guilty of having accorded low priority to publications. I realize now that it was a mistake. Had I planned better, I could have had come out with at least draft papers along with the report which could then be sharpened for publication. I am trying to make amends and

have plans to write papers. I have, from my research at the IHS, material to write at least 20 papers. In next few months I have plans in place to submit at least three or four papers for publication in the peer-reviewed journals. They are in the pipeline and hope once they come out, at least some of the work of the IHS will be available to the larger scientific public health community".

Access to publications: All IHS publications are priced. On the website of the IHS, the information on the publications is displayed. The IHS sells its publication over the counter at its office, and has two distributors, one in Hyderabad and one in Delhi. The publications are also sold at two bookshops in Hyderabad. Those from other parts of the country and internationally can avail of these publications only by sending the amount by cheque or in cash. On the website there is no facility for payment available as yet.

Thus, to certain extent, this policy for dissemination of reports and working papers of the IHS is making them less accessible to wider readership of researchers and activists. At the same time, the revenues earned from the sale of publications constitute a very small proportion of the total income of the institute. We therefore probed the policy and efforts being made by the institute for more efficient dissemination of its publication.

When Dr. Mahapatra was with the APVVP he had started a bulletin to disseminate information and findings of lots of operations research done. However, after bringing it out regularly for few years, and after he was transferred to other department, the bulletin gradually died. At the time of establishment of the IHS, he planned publication of a journal. But under Indian laws, an institution receiving foreign grant is not allowed to publish a registered journal, so the plan could not take off. Thus, according to Dr. Mahapatra, the IHS started publishing its own work:

"Our vision was to publish our work, but the publication wing of the institute had not been developed. After coming whatever little work we had done earlier plus whatever work we were doing...we starting binding them and making them available as publications and we charge some Rs.100 or Rs.50 for each of those publications."

The IHS is conscious about limited reach of hard copies of its priced publications. So it has started digitalizing its old publications, not available as soft copies. He said that, "what we have done is (we are) digitizing them....actually we are scanning lot of them and we are going to put it up this year on the website."

The new director of the IHS was also very conscious about the limited access of publications and unveiled his plans:

"No, it doesn't. Now actually I have joined, I will see that, now we're developing our website for all our publications. I want to keep one small abstract and price it so anybody can access and can purchase also. That arrangement I'm going to make."

They intend to develop a multi-purpose pay portal where they not only sell their publications but the donors can also make donation. Dr. Mahapatra succinctly stated the rationale for not making publications available free for download or as hard copies:

"We are viewing publication as an important source of revenue and this is again broad-basing revenue. Now RS 15000 earned from our publication is worth lakh of rupees to us as opposed to money earned in projects".

IX Conclusion

The IHS has in last 20 years gradually grown and found a niche for itself. Unlike many classical NGOs of late 1960s and of 1970s – which emerged from a strong critique of the government and the bureaucratization of services – the IHS is an NGO that emerged from the needs of the government services and with the direct private initiative and involvement of the bureaucrats. Although over years it has remained low funded and have had very few senior health researchers at any point of time, it could still play some important role in the state and national level health policy arena. While the IHS has evidently maintained fair amount of independence in the research carried out by it, there are skeptics who feel that it needs to do more in order to set its own agenda and lead the state in having appropriate policies. Indeed, as the IHS develops into a more stable and bigger institution, it may be able to do so if it is able to put together a critical mass of competent faculty having strong independent pro-people perspective.

In whatever direction it goes, it still have to find some solution for its long term sustainability. In the present situation in the country when the NGOs are not able to mobilize core institutional funds, whatever bold initiative it takes for this will be having its own risk. But there is no way it can avoid such risk taking, it can only do better planning to avoid any harm to the institution in case some of its plans do not succeed. So in that sense, its efforts to set up its own campus and begin public health training courses are for improving its chances for long term sustainability.

Annexure 1

We thank the following individuals for providing information (names are in alphabetic order)

- Dr. George CK
- Dr. Iyengar
- Dr. Mahapatra Prasanta
- Ms. Mary I.
- Mr. Narsappa
- Mr. Pattanayak G. S.
- Mr. Prasad OSVD
- Ms. Sandhya Sree B.
- Dr. Sangwan Veerendra Singh
- Ms. Sarita K.
- Dr. Satyanarayana P
- Ms. Srikanthi B.
- Ms. Srilatha S.
- Mr. Subramaniam L. V.
- Mr. Surendra G.
- Dr. Thomas Vimala
- Dr. Thota Dayakar
- Dr. Venkateswara Rao P.

.

Annexure: 2

List of employees (September 2009)

S.N	Designation	Gender	Qualifica	tion	1 00	Date of
0.	Designation	Gender	Academic	Other	Age	Joining
1	Director	Male	MSc(Statistics)			03-Sep- 09
2	Project Coordinator	Female	M.Sc (Food Science & Nutrition)		32	18-Mar- 09
3	Faculty	Female	MSc.,MSW.,Mphil			2006
4	Project Manager & Finance Officer	Male	MA(Economics), MBA,	Honors Diploma in Computer science	32	22-Mar- 03
5	Research Associate	Female	M.Sc (Micribiology)	PGDCA From ICSS	30	16-Jun- 03
6	Research Assistant	Male	M.Sc(Micribiology), Mphil		28	18-Jun- 05
7	Research Fellow	Male	MA in Sociology		31	1-Oct-06
8	Research Fellow	Female	Master of Socialwork(Family & Child welfare)		31	5-Nov- 06
9	Research Fellow	Female	Masters Degree in Science(Nutrition & Dietetics)		28	20-Jul- 09
10	Research Intern	Male	M.Sc(Psychology)		28	26-Jun- 09
11	Project Intern	Male	B.Sc(Computers)		21	6-Aug- 09
12	Project Intern	Female	Masters in Socialwork		25	10-Aug- 09
13	Lab Technician	Female	BSc(Medical Lab Technician)		22	6-Jul-09
14	Lab Technician	Male	Inter(Medical lab Technician)		23	6-Jul-09

15	Lab Technician	Male	BSc(Medical Lab Technician)		24	6-Jul-09
16	Lab Technician	Male	BSc(Medical Lab Technician)		25	6-Jul-09
17	Chemistry Intern	Male	MSc(Organic Chemistry)		24	8-Feb- 07
18	Microbiology Intern	Female	M.Sc(Micribilogy)		26	20-Jul- 09
19	Lab Intern	Male	Intermediate	Diploma in Office Automation	25	2-Jun-05
20	Lab Intern	Male	SSC		24	27-Jul- 09
21	Accountant	Male	Bachelor Degree in Commerce	DCA,Diplo ma in Accounting & Hardware	34	5-May- 06
22	System Administrator	Male	Bsc(Computer Science)	MCSE,CCN A, EMC & Redhat Linux 9.0V	27	15-Nov- 07
23	Executive Assistant	Female	Bachelor Degree in Arts	Typewriting (Higher Grade) Certified by SBTET, HDSE from APTECH & CHISA from IHS	35	7-Aug- 03
24	Front Office Executive	Female	BSc(Computers)	PGDCA	25	6-Oct-06
25	Service Provider	Female	6th Pass		34	3-Oct-05
26	Lab Service Provider	Female	SSC		31	4-Sep- 06

Annexure 3

IHS Financial Analysis

Funding wise Analysis:

Particulars	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
			1018897			
Core Funding	0		(15.00)			
		1284440	27593	583200		
Research Grant	0	(33.00)	(0.42)	(8.00)		
	6676243	1294619	4509488	5653380	7086967	2647624
Funded Projects	(88.00)	(33.00)	(69.00)	(73.00)	(86.00)	(62.00)
	199415	90750	1024983	1489841	1125920	1449423
Consultancy Fees	(3.00)	(2.00)	(16.00)	(19.00)	(14.00)	(34.00)
	704663	1202905				175000
Training fees	(9.00)	(31.00)				(4.00)
Others	0					
	7580321	3872714	6580961	7726421	8212887	4272047
Total	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Agency Wise Analysis:

Particualrs	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09
	453113	275650	673186	1277734		98849
MoHFW, GoI	(6.00)	(7.00)	(10.00)	(17.00)	30518	(2.00)
DoHMFW/CoFW,			113880	1486631	201204	
GoAP			(2.00)	(19.00)	(2.00)	
			460000			
Other Ministries			(7.00)			
Other	636915	1293655	1522627	1208891	1623564	2300933
Departments	(8.00)	(33.00)	(23.00)	(16.00)	(20.00)	(54.00)
Other State Depts						
			450000	1104507	1711212	175000
WHO			(7.00)	(14.00)	(21.00)	4.00)

	3500000		1250000			
UNDP	(46.00)		(19.00)			
	1896767	470160		543532	3000000	775000
Bilateral Agencies	(25.00)	(12.00)		(7.00)	(37.00)	(18.00)
Private		150000	163800	681649	806112	922265
Foundations, India		(4.00)	(2.00)	(9.00)	(10.00)	(22.00)
Private						
Foundations,	826363	398809	1919875	840277	840277	
Foreign	(11.00)	(10.00)	(29.00)	(11.00)	(10.00)	
		1284440		583200		
ICMR		(33.00)	27593	(8.00)		
	267163					
Others	(4.00)					
	7580321	3872714	6580961	7726421	8212887	4272047
Total	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)	(100.00)

Project etails:

Ford Foundation			1018897			
NHA	1097040	470160				
BoDSEI	3500000		1250000			
Health Insurance	262350	275650				
RHSSR	190763		531216			
ЕНЕ	799727	398809				
HIV /Alliance	826363		826863	840277	840277	
APHCourse	227163					
CHISA	40000					
CoD		150000	163800	161297	236516	195126
ICMR		1284440	27593	583200		
MPHCR (Tribal)	437500	1202905				
APHIDB	108665					
System Admin	90750	90750				
NHA Ngo			450000	150000		

APYP					80000	
SPIU/MTEF-						
Orissa					3000000	775000
NACP -III			141970	1277734	30518	
MTEF AP			113880	170361	106404	
IES			74115			
Airpollution			460000			
Critical Gaps			497644		497644	
HMWSSB			1024983	1208891	1125920	1045133
SAUCE				574719		
RCH-III				1299600		
MTEF MP				543532		
Champion-Nandi				239402	159508	322849
WSP				165488	937762	
NHA Manual				83750	251250	
NRHM				16670	14800	
OoPE				130550	522200	
TNS				280950		
Cecilia health						
care					410088	
Doctor						
Availability						1255800
NHSRC-Satelevel						98849
NEERMAN						404290
HealthFinWKSP						175000
Total	7580321	3872714	6580961	7726421	8212887	4272047

Annexure 4: External publications arising from the Work at the IHS

Period: 2005-09 (Seven publications)

~-		mi i	T 15 1 1	
Sl	Date	Title	Journal, Book Title	Authors
1	2006	Reducing HIV risk behaviors	Horizons Research	Samuels F, Verma
	Apr	among key populations by increasing community involvement and building social capital: Baseline findings from Andra Pradesh, India.	Update. New Delhi: Population Council., 2006.	R And CK George
2	2006 Oct.	Mineral Sands Mining in Kerala: Issues in Health.	University College Journal of Politics & Society. 2006 Oct; 2(2&3):33-43.	Subodh Kandamuthan
3	2006 Nov	Social capital and HIV risk behavior among female sex workers and men who have sex with men in Andhra Pradesh: Insights from quantitative and qualitative data.	USAID Horizons Research Update.Washington, DC: Population Council.	Samuels F, Verma R., CK George and PertiiPelto
4	2006	Stigma, discrimination and violence amongst female sex workers and men who have sex with men in Andhra Pradesh, India.	In: Gender and health: policy and practice. A global source book. Edited by Sarah Cummings, Henk van Dam and Minke Valk, Royal Tropical Institute, Amsterdam and Oxfam GB, 2006	
5	2007 Jul	Is rural stint for doctors a good idea?	Editorial, Economic Times, New Delhi, 9th July 2007,	C K George
6	2007 Oct	Civil registration systems and vital statistics: successes and missed opportunities.	The Lancet Series - Who Counts? 2007 Oct 29.	Prasanta Mahapatra; Kenji Shibuya; Alan D. Lopez; Francesca Coullare; Francis Notzon; Chalapati Rao;Simon Szereter, and Monitoring of Vital Events (MoVE) writing group.

Sl	Date	Title	Journal, Book Title	Authors
7	2009	Is fecal contamination of drinking	Journal of Water and	Jaysheel Eschol;
	Jan	water after collection associated	Health. 2009 Jan;	Prasanta Mahapatra,
		with household water handling and	7(1):145-54.	and Keshapagu
		hygiene practices? A preliminary		Sarita.
		study of urban slum households in		
		Hyderabad, India.		

Period: 1991-2004 (29 publications)

Sl	Date	Title	Journal, Book Title	Authors
1	1991	Allocation of Government	Demography India, 20(2),	Prasanta Mahapatra
		Health Services Expenditure	pp297-310	and Peter Berman
		in Andhra Pradesh, India,		
		During the Eighties.		
2	1991	Secpondary level hospital	Hospital Management	Prasanta Mahapatra
_	1001	roles.	International, p126-128	B
3	1994	Using Hospital Activity	International Journal of Health	Prasanta Mahapatra
		Indicators to Evaluate	Planning and Management,	and Peter Berman
		Performance in Andhra	Vol-9, pp199-211.	
4	1994	Pradesh, India	Dullatin of the Indian Institute	Duaganta Mahanatua
4	1994 Jul	Social Evolution of Hospitals. How Is It	Bulletin of the Indian Institute	Prasanta Mahapatra
	Jui	Relevant For Health Policy?	of History of Medicine, 24(2), pp177-201	
5	1995	Resource Allocation for	Health Policy And Planning;	Prasanta Mahapatra
3	1773	Public Hospitals in	10(1), pp29-39	And Peter Berman
		AndhraPradesh, India	10(1), pp2) 3)	Tina I etel Bellian
6	1996	Hospital Autonomy in India:	Harvard School of Public	Mukesh Chawla
	Jul	The Experience of APVVP	Health - Data for Decision	And Alex George
		Hospitals	Making Working Paper#40	C
7	1997	Background to Health Policy	Chapter 3 in: World Bank.	Administrative Staff
	Feb	and Planning: Demographic	India New Directions in Health	College of India
	11	Features, Epidemiology and	Sector Development at the	(ASCI)1.
		the Evolving Burden of	State Level: An Operational	
		Disease in the Four States.	Perspective. Washington DC:	
			World Bank; pp. 9-18.	
8	1998	Quality Assurance in	Indian Journal of Nursing &	S. Srilatha Sridhar
0	Sep	Nursing.	Midwifery; 1(2), pp6-12	D . 341
9	1999	IHSNET: Indian Health	In, Saikumar M.L. and Sekhar	Prasanta Mahapatra;
	Apr	Systems Network.	Nirmala. Medical Informatics.	E. Srinath; B.
		Developing Health Informatics Infrastrucutre	Proceedings of the National	Deepak Kumar; G.
			Confrence on Medical Informatics. Institute of Public	Kalyan Ram, and E. Savithri Devi.
		(HII) in Inida.	Enterprise, Hyderabad; pp34-	Saviulli Devi.
			43.	

C1	Doto	Title	Journal Book Title	Authors
	Date	The Need For A	Journal, Book Title	Authors Linika Nanda
10	2000 Ion		Journal of Academy of	Lipika Nanda
	Jan	Computerized Patient-	Hospital Administration; 12(1),	
		Record System For the	pp7-13.	
		Public Hospitals In Andhra		
11	2000	Pradesh.	In Draggedings of the National	Manda Linilea
11	2000 Fab	Building Health Informatics	In, Proceedings of the National	
	Feb	Infrastructure (HII) in India -	Conference on Medical	Mahapatra Prasanta;
	25	An Update as in the Year 2000.	Informatics. Hyderabad:	Srinath E., and
		2000.	Institute of Public Enterprise	Deepak Kumar B.
12	2000,	Designing An Accreditation	(IPE); pp. 29-38. Hospital Administration; 37	Lipika Nanda
12	2000, Mar /	system For the Health Care	(1&2), pp88-99.	Lipika Nailua
	Jun		(1&2), pp86-99.	
	Juli	Organisations in Andhra Pradesh.		
13	2000	** ** * * * *	Health for the Millions; 26(4),	Alex George And S.
13	Jul/	Private Hospitals,	pp29-31.	Srilatha
	Aug	Tivate Hospitais,	pp27-31.	Siliatila
14	2000	A Strategy for	In Proceedings of the National	Nanda Lipika;
	Nov	Computerisation of the	Conference on Medical	Prasad V., and
	24.	Management Information	Informatics; Vijayawada.	Deepak Kumar B.
		System of Public Hospitals	Hyderabad: Institute of Public	z copum ramur z.
		in Andhra Pradesh: HIMAN	Enterprise (IPE); pp52-64	
		2000.		
15	2000	Hospital Waste	In HK Patra Ed, Environment	Lipka Nanda
		Management: A Model of	& Disaster Management, Utkal	1
		Authorisation And Renewal	Univ., Bhubaneswar, pp 136-	
		Process Linked to Medical	147.	
		Waster Audit.		
16	2001	Cause of death reporting	National Medical Journal of	Prasanta Mahapatra
	May	system in India: A	India; 14(3), pp154-162	And Chalapati Rao
		performance analysis		-
17	2001	Total Quality Management	Indian Journal of Nursing &	Lipika Nanda
	Jun	(TQM) of obstetric services	Midwifery; 4(1), pp19-28	
		in Andhra Pradesh		
18	2001	A Patient Satisfaction	Journal of Academy of	Prasanta Mahapatra,
	Jul	Survey in Public Hospitals	Hospital Administration;	S. Srilatha, P.
			13(2)pp11-15	Sridhar
19	2002	Priority setting in the health	National Medical Journal of	Prasanta Mahapatra
	Mar	sector. Why is a good cause-	India (Natl Med J India). 2002	
		of-death reporting system	Mar-2002 Apr 30; 15(2):90-92.	
		important?		
20	2002	Quality of Reproductive	Economic and Political	Alex George
	Apr	Care in Private Hospitals in	Weekly. 2002 Apr 27:1686-	
		Andhra Pradesh. Women's	1692.	
		Perception.		

Sl	Date	Title	Journal, Book Title	Authors
21	2002	Priority-Setting in the Health Sector and Summary Measures of Population Health	Ch2.5, in: Christopher JL Murray; Joshua A. Salomon; Colin D. Mathers, and Alan D. Lopez, Editors. Summary Measures of Population Health. Concepts, Ethics, Measurement and Applications. 1st ed. Geneva: WHO; 2002; pp. 83-89.	Prasanta Mahapatra
22	2002	The 6D5L description system for health state valuation.	Ch7.4, in: Christopher JL Murray; Joshua A. Salomon; Colin D. Mathers, and Alan D. Lopez, Editors. Summary Measures of Population Health. Concepts, Ethics, Measurement and Applications. 1st ed. Geneva: WHO; 2002; pp. 349-367.	Prasanta Mahapatra; Lipika Nanda, and K.T. Rajshree
23	2002	Measuring health state values in developing countries - results from a community survey in Andhra Pradesh	Ch9.3, in: Christopher JL Murray; Joshua A. Salomon; Colin D. Mathers, and Alan D. Lopez, Editors. Summary Measures of Population Health. Concepts, Ethics, Measurement and Applications. 1st ed. Geneva: WHO; 2002; pp. 473-485.	Prasanta Mahapatra; Joshua A. Salomon, and Lipika Nanda
24	2002	Quality Assurance in Health And Accreditation.	Catholic Health Association of India (CHAI); Secunderabad	Alex George
25	2002	Quality Assurance in Health: National and International Scene And Private Health Care Legislation in India.	Catholic Health Association of India (CHAI); Secunderabad	Alex George
26	2002	The verbal autopsy based cause of death reporting system in rural areas of India.	Demography India. 2002; 31(2):235-252.	Prasanta Mahapatra
27	2003	Exposure to Indoor Air Pollution: Evidence from Andhra Pradesh, India.	Regional Health Forum. WHO South-East Asia Region. 2003; 7(1):56-59.	Balakrishnan Kalpana; Mehta Sumi; Kumar Satish, and Kumar Priti.

Sl	Date	Title	Journal, Book Title	Authors
28	2003	Quality Health Care in	Chapter 13 in: Abdo S.	Prasanta Mahapatra
		Private and Public Health	Yazbeck and David H. Peters,	
		Care Institutions.	Editors. Health Policy	
			Research in South Asia.	
			Building Capacity for Reform.	
			First ed. Washington DC: The	
			World Bank; 2003; pp. 333-	
			367.	
29	2004	Indoor Air Pollution	Washington DC, USA: World	Balakrishnan
	Jun	Associated with Household	Bank; 2004 Jun.	Kalpana; Mehta
		Fuel Use in India. An		Sumi; Kumar Priti;
		expossure assessment and		Ramaswamy
		modeling exercise in rural		Padmavathi;
		districts of Andhra Pradesh,		Sambandam Sankar;
		India.		Satish Kumar
				Kannappa, and
				Smith Kirk R.

Annexure: 5

Contribution by Fellows and Interns at the IHS:

Publications by Fellows and Interns during 2005-2009:

Sl	Name, &	Publication	Authors
	Internship		
	period		
1	B Kavitha	Social Context Assessment for HIV/AIDS	CK George, Kavitha
	Krishna	Prevention Programmes in Andhra Pradesh.	Krishna, NS Reddy,
		Report of the Outcome Evaluation of the	B Srikanthi.
		Frontiers Prevention Programmes, RP	
		32/2005, The Institute of Health Systems,	
		Hyderabad	
2	Jaysheel Eschol	Is fecal contamination of drinking water	Jaysheel Eschol;
		after collection associated with household	Prasanta Mahapatra,
		water handling and hygiene practices? A	and Keshapagu
		preliminary study of urban slum households	Sarita.
		in Hyderabad, India. Journal of Water and	
		Health. 2009 Jan; 7(1):145-54.	

Publications by Fellows and Interns during 1991-2004:

S	Name of	Publication	Authors
1	Fellow /		
	Intern		
1	Swathi	A study of the cold chain system in Andhra	Prasanta Mahapatra,
	Gayathri	Pradesh. IHS Working Paper #45/2002	Swati Gayathri, Samatha
			Reddy
2	E. Srinath;	IHSNET: Indian Health Systems Network.	Prasanta Mahapatra; E.
		Developing Health Informatics Infrastrucutre	Srinath; B. Deepak
		(HII) in Inida. In, Saikumar M.L. and Sekhar	Kumar; G. Kalyan Ram,
		Nirmala. Medical Informatics. Proceedings of	and E. Savithri Devi.
		the National Confrence on Medical Informatics.	
		Institute of Public Enterprise, Hyderabad; pp34-	
		43,1999 Apr.	

S	Name of	Publication	Authors
1	Fellow /		
	Intern		
3	B. Deepak	IHSNET: Indian Health Systems Network.	Prasanta Mahapatra; E.
	Kumar	Developing Health Informatics Infrastrucutre	Srinath; B. Deepak
		(HII) in Inida. In, Saikumar M.L. and Sekhar	Kumar; G. Kalyan Ram,
		Nirmala. Medical Informatics. Proceedings of	and E. Savithri Devi.
		the National Confrence on Medical Informatics.	
		Institute of Public Enterprise, Hyderabad; pp34-	
	E G 11 1	43,1999 Apr.	D . 1/1
4	E. Savithri	IHSNET: Indian Health Systems Network.	Prasanta Mahapatra; E.
	Devi.	Developing Health Informatics Infrastrucutre	Srinath; B. Deepak
		(HII) in Inida. In, Saikumar M.L. and Sekhar	Kumar; G. Kalyan Ram,
		Nirmala. Medical Informatics. Proceedings of	and E. Savithri Devi.
		the National Confrence on Medical Informatics.	
		Institute of Public Enterprise, Hyderabad; pp34-	
_	V D	43,1999 Apr.	Nanda I indaa Daasa W
5	V. Prasad	A Strategy for Computerisation of the	Nanda Lipika; Prasad V.,
		Management Information System of Public Hospitals in Andhra Pradesh: HIMAN 2000. In	and Deepak Kumar B.
		Proceedings of the National Conference on	
		Medical Informatics; Vijayawada. Hyderabad:	
		Institute of Public Enterprise (IPE); pp52-64,	
		2000 Nov 24.	
6	Sumi Mehta	Exposure to Indoor Air Pollution: Evidence from	Balakrishnan Kalpana;
Ü	~ WIIII 1:101100	Andhra Pradesh, India. Regional Health Forum.	Mehta Sumi; Kumar
		WHO South-East Asia Region. 2003; 7(1):56-59,	Satish, and Kumar Priti.
		2003.	,
_		Indoor Air Pollution Associated with Household	Balakrishnan Kalpana;
		Fuel Use in India. An expossure assessment and	Mehta Sumi; Kumar Priti;
		modeling exercise in rural districts of Andhra	Ramaswamy Padmavathi;
		Pradesh, India. Washington DC, USA: World	Sambandam Sankar;
		Bank; 2004 Jun.	Satish Kumar Kannappa,
			and Smith Kirk R.