

An international partnership to help the poor gain sustained access to improved water supply and sanitation services

Towards Sustainability with Equity



Water and Sanitation Program

East Asia and the Pacific

(WSP-EAP)

Proceedings of

East-Asia Regional Conference

Chiang Mai, Thailand March 7-9, 2001

This document is produced and distributed by the
Water and Sanitation Program - East Asia & Pacific of the
World Bank Water and Sanitation Program, who are solely responsible for its contents.

The views and information contained herein do not necessarily reflect the views of the World Bank and do not imply the expression of legal opinion whatsoever concerning the legal status of any country, territory, city, area, or concerning the delineation of national boundaries or national affiliations.

TOWARDS SUSTAINABILITY WITH EQUITY

WSP-EAP Regional Conference Report

Chiang Mai, March 7-9, 2001

TABLE OF CONTENTS

	Preface	2
l.	Overview : What was the conferece about ?	3
II.	Where are we now in the quest for Sutainability and Equity?	6
III.	What priority questions do we want addressed ?	9
IV.	The history of WSS in East Asia : "The great bamboo raft ride"	1
V.	Sector knowledge milestones crossed in previous regional conferences	13
VI.	Sustainability & Equity :	
	Taking stock of our knowledge	15
VII.	Ideas Fair	20
VIII.	Country analysis : Are current policies & strategies supportive	
	enough ?	21
IX.	Networking for times ahead	24
X.	How to move forward	25
	End Notes	31
	Conference Evaluation	32
	Participants	33



- Do they work?
- Are they sustained?
- Do they benefit everyone, including the poor in the community?



These are the questions that are now being asked for evaluating the effectiveness of infrastructure services funded by development assistance. As we step into the 21st century, greater accountability is being demanded of investment projects, for outcomes that are sustainable and more equitable than in the past decades, when the focus was overwhelmingly on just the construction of a targeted number of facilities.

The water and sanitation sector is responding to the new definition of its goals by re-defining its policies and indicators for success in terms of sustainability and equity. In countries across the world, sector institutions, policy makers and investors are seeking to understand what the changes mean for them. In the perspective of this common interest and quest, WSP-EAP organized its 2001 annual conference for stakeholders in East Asia, on the theme "Towards sustainability with equity".

It has been a WSP-EAP tradition to bring together clients and partners in the region for an annual thematic event focused on a specific learning agenda of current interest to all. These events are unlike usual conferences. There are no overhead projectors, no PowerPoint presentations, no formal papers to be read and strictly no business suits. There is, however, intense and thoroughly enjoyable learning by individuals and groups, as borne out by evaluations of the events by the participants.

As in previous years, this conference too was designed to draw upon the participants' diverse personal experiences, skills and knowledge and focus them on collectively exploring the unknowns of relevance to all. Allen Hard, the process designer and principal facilitator, wove his special magic keeping participants engrossed in their quest. As this report shows, the informality generated by the process allowed people to come out of their official personae and engage fully in the process of pooling their knowledge, learning from each other and reaching new insights together.

The conclusions and consensus we reached together with our partners will add greatly to the directions our work takes in the EAP region. We look forward to coming together again next year, to review progress and take the next steps forward.

Caroline van den Berg

Nilanjana Mukherjee

July 2001, Jakarta

OVERVIEW:WHAT WAS THE CONFERENCE ABOUT?

Some fifty two sector professionals mainly from East Asia gathered in Chiang Mai in March 2001, to collectively push the frontiers of knowledge about approaches to achieve sustainable and equitable water and sanitation service (WSS) for the poor. Although their focus was on East Asia, learning from across the world was drawn upon and mulled over. The event aimed at furthering, in the EAP region:



- Common understanding of what is 'sustainability' and what is 'equity' in Water Supply and sanitation (WSS) projects and how they are related.
- Consensus regarding how to move forward in ideas and actions.

The event was designed to:

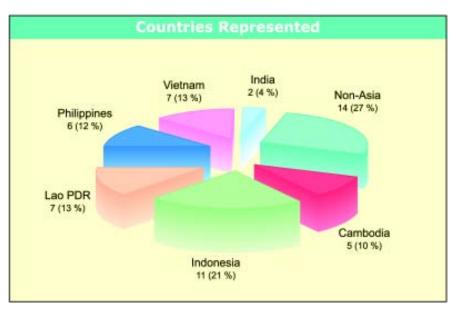
- Maximize learning from each others' experiences.
- Facilitate networking for future collaboration.
- Investigate what leads to the effective transfer of experience & learning.

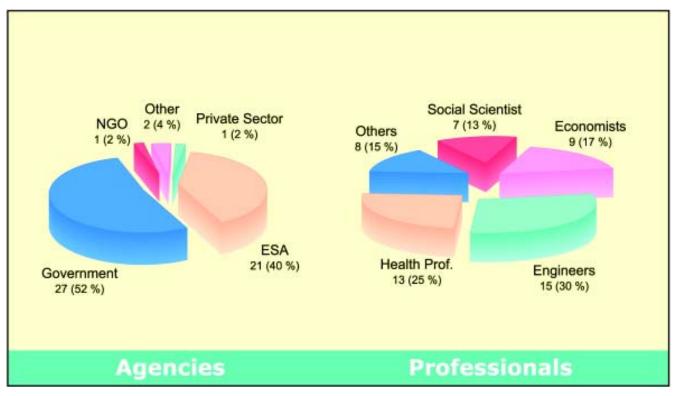


Essential concepts were explored and defined. Sector trends were traced over past decades to identify where we stood in 2001 in terms of sector knowledge. Participants then identified what was known and still unknown about *sustainability* and *equity* from their own sector experience in East Asia, and globally. Country groups rated their national sector policies and strategies in term of sustainability and equity, with some eyeopening results. Finally, different groups worked on integrating the twin principles of *sustainability* and *equity* in defining how they could be operationalized through ongoing and future water supply and sanitation interventions.

This report is a summary of the process and outcomes of the conference deliberations. It represents the voices of leading WSS practitioners and stakeholders in East Asia, making a strong collective statement about directions for the future, i.e. WSS investments are justified only if they are: a) sustainable and b) serve the poor within the society equitably. They also agreed that by now we do know something about how to move forward with this agenda. What is not yet known will have to be learned by working with local stakeholders, using methods that ensure participation of all interest groups. Lessons from bottom-up learning will have to feed upwards and continually refine sector strategies and policies.

The participants from 14 countries included a mix of government and External Support Agency (ESA) personnel, but only a few NGOs and private sector personnel. Health professionals and engineers formed the majority in the professional groupings. This more or less reflected the current sectoral composition in terms of professional expertise. The reigning gender imbalance in the sector was also obviously reflected – there were 11 women among the 52 participants, but more than half of those women were from WSP-EAP and only 5 women were from the country and ESA groups!





Participants quickly got down to business...



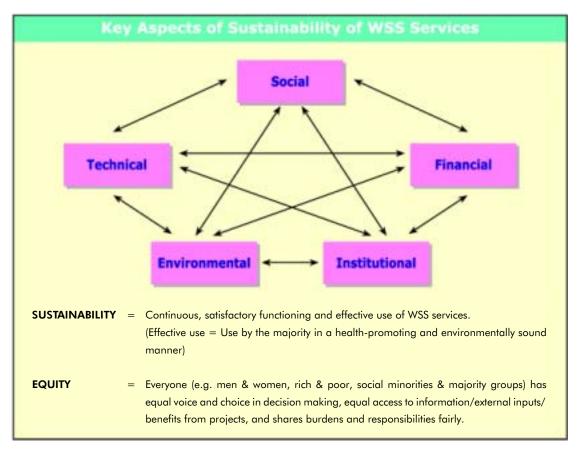


Warming up activity : making self-profile posters

Displaying and explaining them to each other

WHERE ARE WE NOW IN THE QUEST FOR SUSTAINABILITY AND EQUITY?

To refresh people's memories about consensus reached in past conferences and lessons gained from recent global research, the following definitions were offered as a starting point.





Participants then assessed their country situations regarding sustainability and equity in WSS. The 5 following statements were placed at 5 locations around the conference hall. People walked over to the statement that they agreed with. The resulting distribution was like this.

How the participants voted:

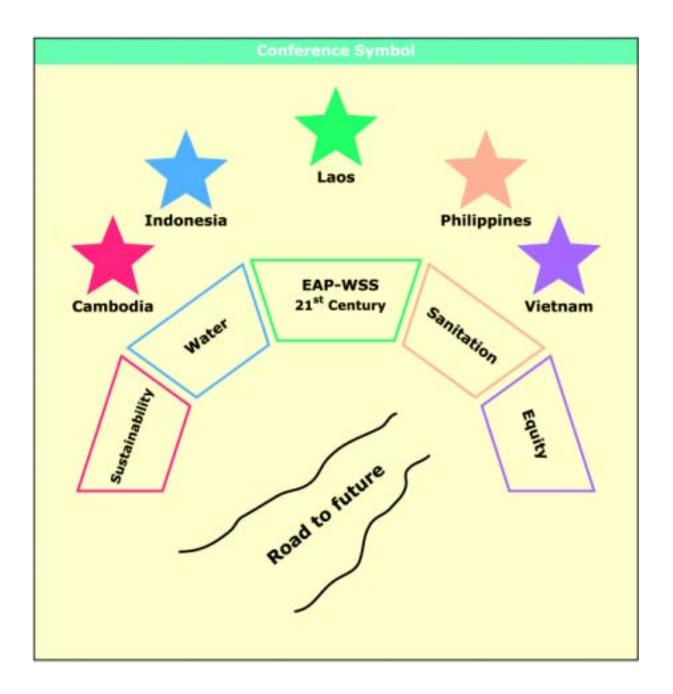
"In the country where I work most, sustainable and equitable water and sanitation services for the poor have, over the last 30 years:

- š Gotten worse (4 persons)
- š Stayed about the same (8 persons)
- š Showed a little improvement (14 persons)
- š Showed significant improvement (2 persons)
- š Don't know (24 persons)



The most significant result of this exercise was the large clustering of participants under "Don't know".

People in the cluster explained that sector professionals generally have their personal impressions about the issue but there are no definite statistics or methods of knowing for sure whether services are getting better or worse for the poor.



The five stone-arch was introduced at this point as the visualization of the theme of the conference. It suggests that *Sustainability* and *Equity* are the principles (the pillars) that water and sanitation services must be founded on, in the 21st century. The arch spans the road to the future of the sector, in the EAP countries represented by the stars over the arch.

WHAT PRIORITY QUESTIONS DO WE WANT ADDRESED?

Participants were asked to think of the most important questions they would like to see addressed in the conference. Individual's questions were considered by groups and then clustered by them. The following major question areas emerged as priorities:

- š How to implement sustainable and equitable WSS services?
- š What is EQUITY? How to measure Equity? How to measure Sustainability?
- š How to work with communities towards sustainable and equitable WSS services?

This is the complete list of questions

š What does really work? š How to make sustainability & equity easy to implement? š What kinds of institutional arrangements are needed for sustainability of services? š How do we decide what technologies and policy direction are appropriate for the local situation? š How can RWSS services be made sustainable & equitable? š What are the steps to increase sustainability & equity in WSS program? š How do we make it happen all the time in WSS programs? š How sustainably and equitably do we do water supply and environmental sanitation projects now? **HOW TO IMPLEMENT** š What is the role of the private sector in the provision of equitable WATSAN **SUSTAINABLE &** services? **EQUITABLE SERVICES?** š What approaches lead to sustainability & equity in WSS? š How do we move from agreement on principles & policies to actions that involve institutions & organizational change (for Sustainability & Equity of services)? š Which approach should be used for effective, efficient water & sanitation services? š How to address sustainability throughout the project cycle? š What are the key inputs needed from rural communities for the sustainability & equity of WSS? What are the "key" indicators of Sanitation & Environment? š What are the cost implications of this new approach (DRA)?

WHAT IS "EQUITY" ?

- š What does equity really mean in the context of the "willingness to pay" principle?
- š Need to reach agreement on what is EQUITY in community WSS and some ways to address it in rural and urban WSS
- š How to reach the poor?

HOW TO MEASURE : Š SUSTAINABILITY ? Š EQUITY?	 š How to measure sustainability & equity? š Simple means to measure sustainability & equity? š How many keys factors of sustainability & equity can be supported in WSS program? š How to monitor & evaluate sustainability & equity? š How do we know sustainability when we see it? (i.e. before we don't have it any more)? š How to get clear: š Policy & strategy š Appropriate practical methods applied which suit local situations.
---	--

	š How to empower people to control their assets ?
"HOW TO"	š How to make sure the community understands that WSS program is very
QUESTIONS FOR	important ?
WORKING	š How to create ownership for poor people in WSS ?
WITH	š How to promote community awareness?
COMMONTIES	š How to promote the ownership of people and local authorities ?
	š How to develop affordability and accountability ?

LET US FIND OUT!	š What is the benefit from this conference to the policy of each country ?
HOW TO DEVELOP INCENTIVES IN SECTOR INSTITUTIONS	š How to ensure institutional support for government staff to facilitate community-based development (e.g. transport and daily allowances for visiting communities periodically, spending adequate time with communities for demand assessment and capacity building etc.) ?

THE HISTORY OF WSS IN EAST ASIA: "THE GREAT BAMBOO RAFT RIDE"

The East Asia region has seen turbulent times and wars in the past 2-3 decades, as well as rapid changes due to the growth of the Asian Tiger economies in the 1980s, followed by sweeping economic crisis over the past few years.

At the same time significant changes have taken place in the water and sanitation sector globally. The 1960s saw not much happening in the sector The 1970s ushered in a focus on technology, construction and expansion of coverage which spilled over to the 1980s with the International Drinking Water Supply and Sanitation Decade (IDWSSD) being launched in 1980. The sector attracted large investments from governments and donors and universal coverage targets set by the IDWSSD were pursued globally. During the 1990s it became clear that supply-driven, construction—target-oriented approaches were not having the desired impact. They were leading to services being constructed but not effectively used and sustained. Radical new thinking began to permeate the sector in the 1990s towards demand-driven approaches and community-driven development.

Participants worked in 8 groups to trace how these combined events and trends played out in East Asia, in general and in the WSS sector specifically, over the 4 decades from the 1960s till 2001.

The decades were then given thematic titles. The entire timeline for WSS in East Asia & Pacific from 1960 – 2001 was aptly named by participants as "The Great Bamboo Raft Ride Through The Last 40 Years: War, Water and People"





In East Asia Pacific Region	1960-69 "Muddy waters: Staying afloat and looking for love In turbulent times"	1970-79 "Hangover Recovery"	1980-89 "Great Awakening"	1990-2001 "Enlightenment : Globalization and Localization"
General events affecting quality of life. Trends: š Increased reliance on markets. š Better understanding re. empowerment of people. š Economic transition from conflict to organized development.	 "Cold" war polarization. Political instability. War & civil strife throughout South East Asia. Indochina war 1960s-75. Mainly agricultural economies. ASEAN established. 	 Increasing stability, urban growth, green revolution. -Wars and civil strife recede. Political stability improved. End of war in Vietnam. Food security improved (Indonesia). -Slowing population growth. Closed political period. Oil prices increased significantly/oil crisis. - Civil war in Cambodia. 	 High economic growth (Asian dragon/Tiger economies). Economic boom + globalization. Organized development planning picked up pace. Humanitarian relief assistance. Rise of people power. Big political changes/transition. Environmental degradation + concerns become issues. 	- Economic crisis. - Movement towards good governance. - Decentralization, liberalization. - Economic boom & bust - Economic recovery. - Communications technology revolution and globalization. - Degrading environment.
Events, people, things, trends in Water and Sanitation. Trends: Self-sufficient - from top down to bottom up approach. From single to multidimensional approach. From building to sustaining services (change in emphasis). From coverage & access goals to use and sustainability goals. From supply driven, top-down to demandresponsive, bottom-up.	 Not much happening. Supply driven, focus on easily accessible areas. No government WSS intervention, no large scale investments. WSS is not a priority. 	- Raised awareness about WSS in development Focus on appropriate technology Promotion of innovative technology Supply – driven, top-down approach Low WSS coverage WSP-EAP founded Small projects (NGO involvement).	- International Drinking Water Supply and Sanitation Decade (IDWSSD) Focus on WSS strategies, policy development Massive investments on WSS by governments and Donors. External assistance to WSS increased Supply driven and big infrastructure focus Focus on low-cost technologies Unicef Watsan focus/ program Unicef led sector activities Emerging importance of women's participation, community Management First attempts at participatory methods.	 Action plans for agendo 21. Increased demand for safe and environment friendly WSS services. Dublin – Rio principles. Demand responsive approach. Focus on DRA and focus on sustainability just starting. From cost recovery to financing of services. Emergence of private sector involvement in CWSS. Decentralization trend. First mention of gender as a WSS issue (rather than women's participation). Community based gender team building Increased community participation in decision making. Focus on poverty alleviation. "Equity" very new concept in WSS

^{*} History of Water and Sanitation in East Asia and Pacific since the 1960s.

SECTOR KNOWLEDGE MILESTONES CROSSED IN PREVIOUS REGIONAL CONFERENCES

In January 1997, the Water and Sanitation Program, East Asia and Pacific (WSP-EAP) organized its first regional thematic collective learning event in Da lat, Vietnam. Since then 4 more learning events have been organized, some by WSP-EAP, some jointly by WSP-EAP and WSP-South Asia, in Chiang Mai (January 1998), Lombok (October, 1998), Bangkok (December, 1999) and the current one in Chiang Mai again, in March 2001.

These events brought together WSP's clients and working partners from East and South Asia, to collectively analyze challenges facing WSS sector, and share experiences and learning across the region to find ways of overcoming the challenges.

At the Chiang Mai 2001 conference there were some people who had participated in previous events. They shared the following overview of the learning and consensus achieved at the past events, which illustrate how sector thinking and knowledge has been developing in the region. This helped to define the starting point for the learning to be pursued in the current Chiang Mai conference in March 2001.

What are Demand and Demand Responsive Approaches (DRA)? Da Lat, January 1997

Learning & Consensus that emerged:

- Š Definitions of Demand and DRA as distinct from Need and Need-based approaches.
- š Benefits of and problems with DRA.
- š How and to what extent DRA can be promoted in East Asia countries.

2. Improving Sustainability in RWSS Projects Chiang Mai, January 1998

Learning & Consensus that emerged:

- š Understanding of the multi-dimensional nature of SUSTAINABILITY.
- š Definition of sustainability covering its 5 key components: technical, social, institutional, financial, environmental.
- š Consensus about the need to use DRA to reach sustainability.
- š Country-specific examinations of current status re. the use of DRA.

3. Operationalizing Demand – Responsive – Approaches : From Concept to Action

Lombok, October 1998

Learning & Consensus that emerged:

- š Lessons from experiences of operationalizing DRA in large scale RWSS projects.
- š Recognition that operationalizing DRA for water and sanitation involve very different issues and water supply and sanitation programs need to be handled differently.
- š Translating knowledge about DRA into practice requires:
- š Incorporating DRA into sector policies.
- š Building national stakeholder confidence.
- š Documenting & disseminating experience of using DRA..

4. Measured Approaches: Benchmarking in WSS

Bangkok, December 1999

Learning & Consensus that emerged:

- š Advantages and challenges in benchmarking for RWSS projects as compared to institutional benchmarking.
- š Focus on measurement of important but hard to measure issues, e.g. sustainability.
- š Need to combine qualitative and quantitative approaches for effective benchmarking.



SUSTAINABILITY & EQUITY: TAKING STOCK OF OUR KNOWLEDGE

The historical timeline made it very clear that "sustainability" is a fairly recent issue which has gained WSS sector attention only during the last decade of the 20th century. "Equity" is newer still. None of the participants had encountered the "equity" issue in any sector conference to date. There seemed much that was still unknown about the two related concepts.

Participants divided themselves into 4 groups to ponder over three searching questions about SUSTAINABILITY and EQUITY in WSS:

- š Just what do Sustainability and Equity mean in WSS?
- Š What do we now know about increasing Sustainability and Equity, in the 21st century (the "knowns")?
- What do we most need to know to enhance sustainability and equity in WSS (the "unknowns")?

Each group presented its conclusions and lively debates ensued, generating insights for all. The emerging conclusions looked like this.

What is SUSTAINABILITY of WSS services?

- š Continuous, satisfactory functioning and effective use of WSS services by the majority.
- š Unsustainability is relatively easy to identify (after the system fails)





What do we now know about SUSTAINABILITY?

SUSTAINABILITY is multi-dimensional.

It has Social, Technical, Financial, Institutional and Environmental components. They are all interrelated, making sustainability a complex issue.

š Components of SUSTAINABILITY can be measured.

We do have some indicators for the building blocks of SUSTAINABILITY, and methods to assess them. For example:

Social Sustainability

Ø How well do different users groups appreciate or value

the services/system?

Ø Is the system supported by informed social consensus?

Ø Extent of community ownership from the beginning?

Technical Sustainability indicators

Ø How appropriate and acceptable is the technology for the users?

Ø Is it supportable by skills available in the community for operation and maintenance?

Institutional Sustainability indicators

Ø Is there an institutional structure/organization in place to operate, manage, repair?

Ø Does it have the necessary skills?

Ø Is the structure supported by social consensus?

Ø Does it represent voices of all groups of service

users?

Financial Sustainability indicators

Ø Are operation and maintenance costs covered by user payments?

Ø Are repair & replacement costs covered?

Ø Are users happy to pay for services? Satisfied with

services?

indicators

Environmental Sustainability Ø Does the operation of the services incorporate sound water resources and environmental management practices?

š Process of service establishment is very important to ultimate sustainability

e.g. :

- Leadership that allows voices of all to be heard.
- Community ownership from the beginning.
- Community choice in key decisions.
- Community capacity building to manage and maintain services.

What do we now know about EQUITY?

š Current sector practices are not equity-promoting

- Current practices do not lead to very equitable outcomes.
- EQUITY is not considered seriously in every step of project development.
- There is no common understanding among sector stakeholders about EQUITY.
- Current subsidy policies do not necessarily promote EQUITY.
- There are no manuals/guidelines for incorporation of EQUITY during WSS project development.

š Achieving EQUITY in projects takes special effort

- Targeting poverty is very difficult!
- EQUITY does not happen naturally.
- Informed choice by stakeholders leads to EQUITY.
- It requires targeting to achieve EQUITY.
- Intra-community targeting is essential to ensure EQUITY. Geographic targeting of whole communities does not guarantee that the poor will be reached.
- EQUITY is about democratic processes.
- Service providing agencies are responsible for creating an equity-generating environment.
- EQUITY as a principle needs to be built into policies, laws, regulations that govern the sector.
- Policies, laws, regulations and projects need the means to verify whether EQUITY is being achieved, i.e. indicators for equity & methods of measuring them.

S EQUITY – SUSTAINABILITY relationship

- EQUITY is a part of SUSTAINABILITY. Services are considered as "sustained" only when they continue to serve the majority of users with acceptable levels of service.
- More EQUITABLE services are better SUSTAINED.
- EQUITY is a necessary, but not sufficient condition for SUSTAINABILITY.

THE TOP "UNKNOWNS"- THE FOCUS OF FUTURE LEARNING IN EAP

1. How to enhance SUSTAINABILITY of WSS in the 21st century

š How do we get an overall measure for Sustainability?

- Criteria for measuring?
- How to aggregate indicators/criteria for all components?
- How to monitor and evaluate?
- Sustainability is not as easy to see as "unsustainability" (failed system)

š How to apply the "process for Sustainability"?

- What are the steps?
- What is the cost and time required to apply the sustainability process ?
- What factors influence/should be managed, for sustainability?
- Who is the "community counterpart" with whom service delivery agencies should deal?

š Is a continuous WSS service really achievable?

- How long can we say WSS should be sustainable?
- What is 'sustainable services' for mobile populations, e.g. shifting agriculture settlements, nomadic tribes ?
- What is a 'satisfactory service level'? Is anything good enough? Who defines?
- How to address the constantly increasing competition for scarce water resources?

š How to address sustainability in the poorest areas?

- What if the poor cannot pay?
- Is government subsidy / intervention part of the equation? Without it can WSS really be sustainable?
- What is the role of government, private sector and community in very poor areas?

THE TOP "UNKNOWNS" - THE FOCUS OF FUTURE LEARNING IN EAP

2. How to ensure/enhance EQUITY in WSS in the 21st century

š What policies will promote EQUITY?

- Does private sector participation lead to more equitable services ?
- Do subsides promote equity? Do they hinder equity?
- Do we need a legal basis to promote equity?
- How does equity in WSS link with general equity-promoting policies ?
- Can communities be expected to act in an equitable manner?
- What incentives ensure that equity is considered and promoted by different stakeholders?

š What practices will promote EQUITY?

- How to move from policy to practice?
- How to build "equity" into project activities?
- How to put "equity" into practice?
- How do we know whether we have equity?
- How to measure/verify presence of equity in WSS projects?
- Gender equity: how to ensure & measure?

š Who cares about EQUITY?

- Do decision makers think EQUITY is important? Do they understand what it implies?
- Do donors think EQUITY is important?
- How to disseminate, explain and promote EQUITY to/with all stakeholders?

š Is EQUITY a sustainable state?

- Can project interventions counteract elite capture of benefits in the post-project period?

IDEAS FAIR

The wealth of worldwide experience brought to the conference by the participants was creatively utilized in many ways throughout the conference process. One such way was the Ideas Fair on Day 2 where participants were invited to make 1 minute 'info-mercial' promotion of best examples of what they have seen, learned, and experienced about sustainability and equity. After 9 such info-mercials were presented people voted for the ones they most wanted to hear more about.

The three winning contenders were:

What happens when communities are offered informed choice for Sanitation. WASPOLA project field trials with UNICEF, Government and WSP-EAP collaboration.	Indonesia
Orangi Pilot Project: 100 % community self-financed sanitation infrastructure improvement in poor squatter community, scaled up without external help and with local government recognition.	Pakistan
Transformation of a state-owned Haiphong public service enterprise from an inefficient, poorly performing, highly subsidized public utility to a profitable enterprise serving 500% more households to their satisfaction.	Vietnam





Ten minute presentations were made by the voted speakers, relying on rapidly made visual aids and personal experience from the field. The listeners shaped the rest of the session with specific questions on what they wanted to know more about, for each case

.

COUNTRY ANALYSIS: ARE CURRENT POLICIES & STRATEGIES SUPPORTIVE ENOUGH?

National governments have policies governing various sectors and strategies to guide sector progress towards policy goals. External Support Agencies have globally applicable policy goals and at times well defined strategies to reach them. Facilitating technical assistance agencies such as WSP also have policies and strategies to guide their work across countries.

The conference offered an opportunity to different groups of participants to take a look at their organizational or sector policies and strategies and assess how far they are supportive of *sustainability* and *equity* principles.

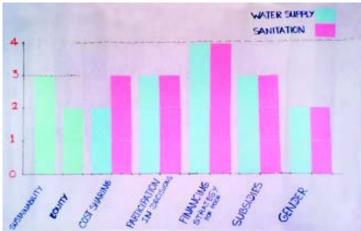
Policy Assessment tools were selected from the Methodology for Participatory Assessments¹ (MPA) and adopted for use at the conference. The purpose was not an official assessment of policies and strategies but to provide the participants an exposure to this new methodology for sustainability and equity monitoring, which has been developed by Water and Sanitation Program in collaboration with the IRC International Water and Sanitation Center. MPA is designed for use with project communities, sector agencies and policy makers.

Participants worked in country groups for this exercises, with facilitation support by a WSP member trained in MPA. Donor agency personnel joined the country groups when they work most. WSP members working in different countries chose to get together and assess where their own organization stands in this respect.

At the conference, two selected MPA exercises were used to examine:

- The extent to which SUSTAINABILITY and EQUITY are explicitly spelt out as policy goals for the national sector/organization
- b) The extent to which organizational/national sector strategies are present to guide progress toward these policy goals, in terms of:
 - Community cost-sharing and management of services
 - Community participation in decisions
 - Financing strategy for the poor
 - Presence and definition of gender in sector interventions

¹ Methodology for Participatory Assessments: Linking Sustainability with Demand, Gender and Poverty; Dayal, R, van Wijk, Christine, and Mukherjee, Nilanjana. Water and Sanitation Program and IRC International Water and Sanitation Centre. 2000.



Results were scored using MPA scales and presented as bar charts by each country group and the WSP group. The actual resulting scores at the conference are not really relevant as they were not carried out under proper research conditions. The value of this simulated assessment lay in the discussions it initiated within and between groups and

the issues it brought to the surface. The hands on experience of using an MPA tool served to illustrate the potential of the MPA methodology for sector and institutional reform processes.



PARTICIPANTS' VIEWS ON THEIR LEARNING FROM THE POLICY ASSESSMENT EXERCISE

1. CAMBODIA group

- **š** Sustainability is a big issue with the government now, as we move from emergency perspectives to long-term perspectives. It is very useful for us to be able to measure & monitor progress towards sustainability.
- **š** Scores for explicitness of *sustainability* in sector policy in Cambodia are low now, but will increase soon, because it is being built explicitly into the sector policy now being drafted. But after that the challenge will be to get everyone to understand and act on it.
- **š** 'Financing Strategy for the poor' is the most interesting one for us because 85 per cent of the population can be classified as poor.
- **š** The first experience with MPA through a sanitation policy study has been useful in Cambodia. We should start by building the capacity of 2-3 persons in each country, who can further develop MPA capacity locally.

2. INDONESIA group

- **š** We have Sustainability explicitly in our policy goals but developing it at the ground level is proving difficult.
- š 'Equity' is a goal explicit on paper but not yet so at the field-level. The middle and upper social classes still have dominance in everything.
- **š** Our financing strategy for the poor is not yet well through out, scores are low.
- **š** We have some definition of 'gender' in water supply projects, but have not done much about gender issues in sanitation.
- **š** MPA seems to be a good self-diagnostic tool, particularly for district and province level. We have to understand better whether and how it can be used at the country level.

3. LAO PDR group

- š Our strong points seem to be 'sustainability in policy goals' and 'financing strategy for the poor'.

 We need to do better in terms of '.presence and definition of gender'.
- **š** MPA seems to present exciting possibilities. It is difficult to digest in 1.5 hours (at the conference)!
- **š** We need proper training in MPA followed by pre-testing of MPA tools to tailor them for application in Lao PDR.
- **š** MPA has to be built into the institutional system, to reap its full benefits.

4. The PHILIPPINES group

- **š** It is thought provoking why the assessments of women and men were different, although they all come from the same institutions (the Philippines team was the only one to do the MPA exercise in separate gender groups).
- **š** Why do women give lower scores for our policies and strategies than men? This can lead to rich debates at community and institution levels.
- **š** MPA scales have to be adopted to better suit country situations. (This is an important requirement, which is taken care of during country level MPA training. This is one of the reasons why MPA should not be implemented without proper training).
- **š** We could not maximize this (assessment) case due to lack of country data. (This was only a simulation).

5. VIETNAM group

- **š** MPA is exciting.
- **š** Why did we score low on 'gender'? Gender is not a big issue in the Vietnam WSS sector. (Male view. Women in the team did not agree).
- **š** This methodology is useful for revealing views of different types of stakeholders on the same subject.
- **š** Knowing how to analyze MPA scores is necessary to get its full value.
- **š** We would like to use MPA to analyze actual practices and results in the provinces, then come back and look at national policies.

6. Water and Sanitation Program group

- **š** Which policies were we assessing WSP global or WSP-EAP?
- **š** WSP's present definition of Sustainability and Equity goals seems to lag behind the latest thinking on these issues.
- **š** The scaling on subsidies needs to be reviewed (country adaptations make the scales more relevant).
- $\check{\mathbf{s}}$ The language in the MPA scales contains a lot of jargon may be difficult to translate.
- **š** We realize that there is no gender policy in WSP.
- **š** The visibility of assessment results possible through MPA can help make policy dialogues/ debates better focussed and constructive.

NETWORKING FOR TIMES AHEAD

At this point in the conference the main issues and challenges had been recognized and examined. The participants had also become familiar with each others' interests, expertise and experiences. The time was ripe for making connections for future collaborations.

Each participant made out a poster about :

- a) his/her area of expertise, and
- b) areas where s/he would welcome assistance from others.

The conference hall walls were lined with these posters, each of which carried 2 envelopes for name cards. The participants walked around and picked up business cards from "GIVE" envelopes of those whom they would like to contact later for specific information or possible collaboration.

They also dropped their own business cards into the "RECEIVE" envelopes of those to whom they could provide some information or technical assistance. The process made it possible, within half an hour, for 52 participants to provide and collect contact information for future networking tailored to their individual interests and skills.



HOW TO MOVE FORWARD



Towards the end of the conference consensus was evolving that:

- š Equity and sustainability are mutually influencing factors.
- **š** Equity is a part of sustainability.
- š We know more about measuring sustainability than we know about measuring equity.

The logical way forward, then, seemed to be to take each key component of sustainability (i.e. social, technical, financial, environmental and institutional), and identify how equity could be built into it.

Participants self-selected themselves into 5 groups to work on different key components of sustainability. Each group focussed on the same four questions :

- š From our understanding of equity, in what ways can equity be built into this component of sustainability?
- š What can be the indicators of equity in these cases?
- š How can these indicators be measured or verified?
- š What implications does this have for agency and project practices?

The results, presented in the five following tables represent a set of concrete, practical ideas and actions that are possible at policy, institution, and community level, to enhance sustainability with equity in water supply and sanitation.



Group conclusions about building the EQUITY principle into ENVIRONMENTAL dimension of SUSTAINABILITY				
How EQUITY can be built into ENVIRONMENTAL	Indicators		How to Measure	Best Practice Implications for Agencies & Projects
SUSTAINABILITY?	Of EQUITY	Of lack of EQUITY		
Socio-Geographic Resource Distribution Equity š Equity of water resource distribution-all neighborhoods are served. š Conservation and protection of water resources. š Equity in daily maintenance responsibility between men/women. š Define purpose of use for different water resources. š Less wastage of water resources.	š All neighborhood are served. š Morbidity of environment related diseases same among the poor and the rich. š Services affordable to the poor. š The poor can access WSS services.	š No subsidized mechanisms for the poor. š The poor live in waste disposal areas. š Water and Sanitation related disease outbreaks only among certain groups.	š Changing lifestyles. š Poll of community satisfaction.	š Recognizing the need for all stakeholders to be involved in project design consultation. š Community involvement and community participation. š Public hearing.
Generational Equity š Equity of resources from one generation to next generation. š Less wastage of resources in view of preserving future supplies.	š Stable groundwater table. š Water quality standards in place. š Environmental standards followed in schemes.	š Water sources being depleted, e.g. ground water mining, deforestation of watersheds. š High UFW (%). (UFW- unaccounted for water) means wasted resources. š Worsening water quality.	š Water availability vs. water consumption projections. š % of collected and treated solid waste & mapping. š Putting up/install observation wells and latrines.	š Need to specifically address environmental issues with participatory methods (go all the way with MPA). š Need for environmental quality objectives in WSS project design.
Quality of Equity š Water users should pay for waste water treatment because waste water is flushing into poor suburb areas. š "NIMBY" issue: ensure that poor areas don't become waste disposal areas for others. š Observing proper sanitation. š Compensation for those people who live in proximity of waste treatment plants. š Develop regulations for use of water supply.	š Use of water sources negotiated between upstream and downstream users. š Proportion of investment for water and sanitation balanced. š Number of environmental regulations in the field of WSS in effect. š Respect for regulations. š Regulation mechanisms that require waste producers to pay the full costs of treating their waste.	š Upstream users capture water source for their own life, depriving those downstream.	š Environmental Impact Assessment. š Health Impact Assessment. š Water pollution monitoring in all communities. š Water quality control and monitoring. š Mapping of sludge disposal & treatment locations, rubbish, tips, landfills. š Environmental audit. š Legislation indicators.	š Need for environmental design standards. š Need for prior knowledge of resource availability and vulnerability. š Clean environment. š Ecologically sustainable sanitation. š Need for supporting policy/regulatory tools.

Group conclusions about building the EQUITY principle into TECHNICAL dimension of SUSTAINABILITY					
How EQUITY can be built into TECHNICAL SUSTAINABILITY?	Indicators	How to Measure	Best Practice Implications for Agencies & Projects		
š Information on technology options, e.g.: System should be sustainable and acceptable to users. Design type matches the target beneficiary's preference.	š Village/community decision on technology option and level of service. š Community action plan. š Community implementation plan. š Different technology options developed with different cost (capital & recurrent) options. š Working life of systems appropriate for users' capacity to replace/upgrade systems. š User friendly (upgradable) systems.	š Memorandum of agreement or community resolution about option chosen and cost-sharing arrangements agreed. š Information kit for facilitating informed choice dialogue with communities.	š Enabling policies/strategies at national level. š Flexibility in design standards. š Sufficient time in project cycle for facilitating informed choice. š Resources for community level dialogues in projects. š Donors/government show interest in design(s).		
š Information on level of services options, e.g.: - Design of services by type or service level option for all community groups' preferences.	š Diversity in technological solutions chosen. š Locally/indigenous options included. š Absence/presence of technology option/solution in an area/community.	š Documents/reports showing success stories.	š Dissemination of guiding principles for equity. š Private sector to know, adopt policies, principles & standards to support equity. š Collection of information from the lowest appropriate level. š Consultation with users in preparation of technology options.		
š Access to service, e.g.: - Services within easy access for the majority of users. š Availability of resources for O & M arrangements.	š Community capacity for O&M built. š Training/technical capacity building. š Logbook/record showing operations manual is being used in the community. š Operators display adequate skills for O&M.				





Group conclusion	s about building the EQUITY Principle in	nto SOCIAL dimension	of SUSTAINABILITY	
ASSUMPTIONS:	š Fair process leads to fair outcomes š Many interlinkages between "SOCIAL" and other dimensions of SUSTAINABILITY			
How EQUITY can be built into SOCIAL SUSTAINABILITY?	Indicators	How to Measure	Best Practice Implications for Agencies & Projects	
š Social acceptability of services to be delivered, e.g. operation of system does not lead to social disharmony or conflicts	š Consensus in community on what they get and what they pay for. š System is culturally appropriate/ sensitive. š Informed consensus by all groups, rich & poor, men & women. š Clear rules on community ownership of systems/assets. š Transparency & accountability to users in operation & management.	š Community audits. š Village action plan containing ways of verifying indicators. š How were / are people selected or re-elected on to managing committee ?	In Project Design § Process guidelines to introduce value of "fairness" (equity) and "sustainability" in community level process in projects. § Process guidelines in projects that bring about "fair" outcomes according to all groups in all phases of project cycle. § Process milestones & indicators for steps in process. § Handing over control to communities early in the project design stage. § Institutional capacity building to use "equity generating" methods (Govt/ NGO/CBO/Local authority/Varies by country). § Adequate funds for community level capacity building in projects/from government.	
š User-centered and gender considerations permeate process, e.g. all groups continue to have a voice in and benefit from the project.	š Community information: equal access to information by rich/poor, women/men, all groups, all literacy levels. š Participation by all in planning, decision-making, choice, distribution of benefits and burdens. š All groups represented on management committees and in key positions. š Voice in decision & control of services by rich/poor, women/men. š Rules & tools of service management specify how 'equity' of access & use will be protected. š Does the community move on to develop other initiatives ? Which groups/individuals do? Which do not? š After the project moves out, the people in the rural areas can motivate by themselves for community action. š The capacity is built within all groups to contribute, manage, participate in the project.	š Check who is on committees ? š Who does what ? š Check committee meetings: who attends Who does not attend ? š Participatory monitoring assessments which are sensitive to gender and equity issues (e.g. MPA)	During Project Implementation š Make charts and map of who gets what ?, Does what ? Controls what ? š Community level analysis by social class, by gender, by ethnicity, by any other major diversity factor. š Participatory assessments and monitoring with users.	

Group conclusions about building the EQUITY principle into FINANCIAL dimension of SUSTAINABILITY					
How EQUITY can be built into FINANCIAL SUSTAINABILITY?	Indicators	How to Measure	Best Practice Implications for Agencies & Projects		
š Fair distribution of costs, financial burdens and benefits.	 š User's willingness and ability to pay at all stages of projects. š Contributions by all stakeholders in system construction. š Cost sharing by all user groups in operation and maintenance, replacing or upgrading of services. š Tariff structure accepted by all users. š O & M costs covered by user community. 	š Cash or in-kind contributions valued in common unit.	š Recognizing that RWSS services have both economic and social value. š Equity principle adopted in WSS development rules, e.g.: - Equalize access to resources, benefits, opportunities through revolving funds or subsidies. š Planning project intervention on the basis of willingness and ability of users to pay for services.		





Group conclusions about building the EQUITY Principle into INSTITUTIONAL dimension of SUSTAINABILITY					
ASSUMPTIONS:	š EQUITY is a dynamic concept applicable throughout the process of service establishment and operation				
How EQUITY can be built into INSTITUTIONAL SUSTAINABILITY?	Indicators	Best Practice Implications for Agencies & Projects			
š In structure	š Composition of village committee : representation of rich & poor, men & women. š Legitimacy & acceptance of the management structure within the community.				
š In operating mechanisms and financial mechanisms	In Village Committees for O & M Š How committee members get selected (elected by all or appointed by few?). Š Equitable sharing of skilled/unskilled and paid/unpaid duties & functions in the committee between men/women, rich/poor committee members. Š Participation by men/women, rich/poor in decision-making for ongoing management of WSS services. Š Who got trained? For what? (equal access for men/women, rich/poor to information & skill training provided by projects). Š Access of users, men/women, rich/poor, to accounts and financial information related to WSS services (transparency of accounts).	š MPA	š Project designs provide a legal basis to promote EQUITY at community level š User – audits of committee performance.		
š In distribution of benefits and burdens.	š Fair distribution among all community members (considered "fair" by the majority).	š Social classification and mapping (MPA). š End-user monitoring of benefits and burdens.			
š In implementing agency practices.	š Participatory gender-and-poverty desegregated monitoring information system used by agencies. š Equity rules or guidelines established in project, with incentives for followers of the rules and disincentives for not following them. š Agency's support mechanisms for village committees to achieve EQUITY facilitation training in skills & participatory process project rules and sanctions indicators to assess progress		š Equity sensitivity training for agency staff. š Enabling EQUITY rules and guidelines institutionalized. š Policy level support for EQUITY in project performance outcomes. š Inter-agency collaboration on EQUITY.		

ENDNOTES.....

on March 9, 2001, at the end of three days of intensive but enjoyable collective learning, the flight to *Sustainability and Equity in WSS*— *East Asia* took off on schedule from the Empress Hotel, Chiang Mai, Thailand.

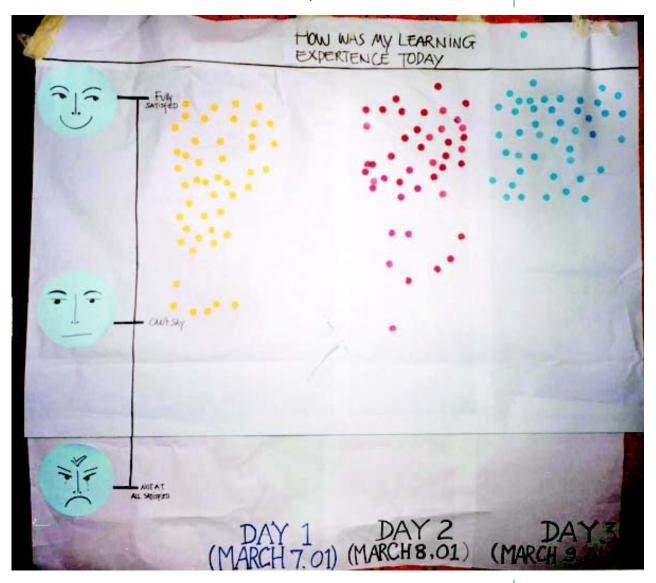
Passengers and crew expressed their solidarity for their common vision by wearing the conference symbol across their fronts, vowing to meet and compare notes on progress a year from now, in terms of the learning agenda that they had identified for the EAP region (detailed in section VI of this report).



CONFERENCE EVALUATION

In keeping with the overall process, the conference did not use structured evaluation questionnaires. A Mood Meter was set up in a corner behind a screen, where participants marked their satisfaction with the learning that was being achieved every day, using colored stickers.

This is how the results looked at the end of three days





Samnang, Chea, Dr.
Director, Rural Health Care Department, MRD
#169, Soviet Blvd.,
Phnom Penh, Cambodia
Tel. (855-12) 873 671
Pcbsamnang@bigpond.com.kh



Bouy Kim Sreang, Mr.
Assistant Project Manager, RWSS PCB
#169, Soviat Blvd.,
Phnom Penh, Cambodia
Tel. (855-12) 925 827/ (855-12) 925 827
Pcbadmin@bigpond.com.kh



Pang Navuth, Mr.
Director, Potable WaterSupply Department, MIME
#45 Norodom Blvd.,
Phnom Penh, Cambodia
Tel. (855-23) 810 272
watersector@bigpond.com.kh



Pang Peng, Mr.
Deputy Director, WSS Department, MOWRAM
#47 Norodom Blvd.,
Phnom Penh, Cambodia
Tel. (855-12) 887 506



Roath Mullika, Ms. Consultant, SAWAC #142 Norodom Blvd., Phom Penh, Cambodia Tel. (655-12) 616 836 kimsoeun@camnet.com.kh



Goulet, Leo WSP-EAP Apt. No. 120B, Embasy Palace Apartments 147 Norodom Boulevard Phnom Penh, Cambodia Lgoulet@Bigpond.Com.Kh



Tel.

Fax.

Phichit, Bounkhouang, H.E. Dr. Vice Minister of Health Ben Watchanh, 1/111 Chanthabuly district Vientiane, Lao PDR

(856-21) 214 000 (856-21) 214 001



Maniphousay, Nouanta, Dr.
Director National Centre for Environmental
Health & Water Supply
Ban Thatkhao, M. Sisahanak,
PO. Box 1225 Vientiane, Lao PDR
Tel/Fax. (856-21) 413 310



Chanthaphone, Soutsakhone, Dr. Deputy Director, National Centre for Environmental Health & Water Suplly
PO Box 261, Vientiane, Lao PDR
Tel. (856-21) 415 726
Fax. (856-21) 413 310
Soutch@laotel.com



Dethoudom, Somphone, Dr.
Director General, Water Supply Authority
(WASA)

MCTP, Lane-Xang Avenu, Vientiane, Lao PDR
Tel/Fax. (856-21) 451 825
icilao@laotel.com



Vangkhonvilay, Phouthone, Dr. Director, Department of Public Health, Luang Namtha Prov.

Ban Luang Namtha district, Lao PDR Tel. (856-86) 312 287

Aphalat, Keophilavanh, Dr.
Director, Urban Research Institute
Dong Palane road Box Build. Vientiane,
Lao PDR
Tel/Fax. (856-21) 416 527



Lahiri, SantanuWSP-EAP
PO Box 345 The Word Bank Vientiane,
Lao PDR

Tel. (856-21) 415 729 Fax. (856-21) 450 015 slahiri@worldbank.org

Fax. (856-86) 312 305



Pickardt, Waldemar Chief, WES UNICEF Vientiane, Lao PDR Tel. (856-21) 315 200-4 Fax. (856-21) 314 852 wpickardt@unicef.org



Phanouvong, SisavanhWSP-EAP
PO Box 345 The Word Bank Vientiane,
Lao PDR

Tel. (856-21) 415 729 Fax. (856-21) 450 015 sphanouvong@worldbank.org



Corpus, Violeta S., Ms.
Project Monitoring Unit, NEDA
Lot 3 Block Mayon st. Country homes, Suad,
Mutinlupa City, Philippines
Tel. (632) 6313755/07

vscorpus@neda.gov.ph



Von Custodio, Dennis, Mr.
Infrastructure Section, NEDA

5 Orchid St. Vergoville Subdivison, Pulanglupa, Lospina Metro, Manila, Philippines

Tel. (632) 631 2192 / 631 3734 dccustodi@neda.gov.ph



Cleofas, Leonor C., Ms.
Metropolitan Waterworks & Sewerage System
105 F. Santos st., Santolon, Malaboa,
Metro, Manila, Philippines
Tel. (632) 928 5691
bcleofas@phionline.com



Saguibo, Antonio, Mr.
Province of Kalinga
PPD Bulanao Tabuk, Kalinga, Philippines



Vergel de Dios, Mario I., Mr. DILG / WSSPMO 5th Fl. Francisco Gold Condo-II EDSA Quezon City, MM, Philippines Tel. (632) 928 6857 nsvdedios@pacific.net.



Ocampo, Rogelio B., Mr. DILG / WSSPMO 5th Fl. Francisco Gold Condo-II EDSA Quezon City, MM, Philippines Tel. (632) 428 6351 abogeo@edsamail.com



Leahy, Peter
AusAID Philippines
Australian Embassy,
5th Fl. Dona Salustiana Tower, 104 Paseo de
Roxas, Mahati, MM, Philippines
Tel. (632) 754 6172
Peter_Leahy@Ausaid.Gov.Au



Sergei Popov
ADB Manila
c/o Asian Dev. Bank,
PO Box 789, 0980, Manila, Phlippines
Tel. (632) 632 6187
spopov@adb.org



Whillas, Andrew WSP-EAP c/o the WB Office Manila 23/F Taipan Place, Emerald ave, Ortigascity, 1605, Philippines awhillas@worldbank.org



Le Van Can, Mr.
Director, CERWASS, MARD

73 Nguyen Hong Road, C10 Nam Thanh
Cong, Dong Da Hanoi, Vietnam

Tel. (84-4) 835 5821
cerwass@fpt.vn



Le Thieu Son, Mr.
Deputy Director, CERWASS, MARD
73 Nguyen Hong Road, C10 Nam Thanh
Cong, Dong Da Hanoi, Vietnam
Tel. (84-4) 835 5823
cerwass@fpt.vn



Nguyen Van Thai MoC 37 Le Dai Hanh street, Hanoi, Vietnam Tel. (84-4) 976 0271 / 448



Nguyen Huy Nga, Mr.
Department of Preventive Medicine
138A Giang Vo, Hanoi, Vietnam
Tel. (84-4) 846 1325
huynga@netnam.org.vn



Phung Xuan Binh, Mrs. ADCOM Company Vietnam

Btcctb@Hn.Vnn.Vn



Stephen Greenhalgh, Mr.
Danida, Vietnam

CERWASS C-10 Nam Thanh Cong,
Hanoi, Vietnam

Tel. (84-4) 123 8152
greenhalgh@fpt.vn@fpt.vn



Van Lint, Jan
Belgian Technical Cooperation (BADC formerly)
Vietnam
57 Tran Phu Street, Hanoi, Vietnam
Tel. (84-4) 733 8761
Fax. (84-4) 733 8762



Thi, Hoa Hoang WSP-EAP c/o The WB Resident Mission 63, Lythai To street, Hanoi, Vietnam Tel. (84-4) 934 6600 Fax. (84-4) 934 6597 hthoa@worldbank.org



Thanh, Nguyen Cong WSP-EAP c/o The WB Resident Mission 63, Lythai To street, Hanoi, Vietnam Tel. (84-4) 934 6600 Fax. (84-4) 934 6597 ncthanh@worldbank.org



Badloe, Chander
UNICEF Vietnam
72, Ly Thuong Kiet street, Hanoi, Vietnam
cbadloe@unicef.org



Medrilzam National Development Planning Agency Jl. Taman Suropati no.2, Jakarta Pusat, Indonesia Tel. (62-21) 392 5390 / 392 5392 medril@cabi.net.id



Hernowo, Basah National Development Planning Agency Jl. Taman Suropati no.2, Jakarta Pusat, Indonesia Tel. (62-21) 334 819 / 323 144 basahhr@usa.net



Legowo, Handi Ministry of Settlement and Regional Infrastructure Jl. Patimura I/1, Jakarta Selatan, Indonesia Tel. (62-21) 573 5509



Wartono, Djoko Ministry of Health Jl. Percetakan Negara No.29, Jakarta Pusat, Indonesia Tel. (62-21) 428 76816 / 42876866 mika@cbn.net.id



Pramudi, Rheida Ministry of Home Affairs Jl. Taman Kalibata No.20, Jakarta Selatan, Indonesia Tel. (62-21) 794 7746



Ms. Pipip Rif'ah Ministry of Home Affairs Jl. Raya Pasar Minggu Km.19, Jakarta Selatan, Indonesia



Arum Atmawikarta
National Development Planning Agency
Jl. Taman Suropati no.2,
Jakarta Pusat, Indonesia
Tel. (62-21) 334 379
arum@bappenas.go.id



Smith, Natasha AusAID Indonesia c/o Australian Embassy, Jl. Rasuna Said, Jakarta Selatan, Indonesia Tel. (62-21) 2550 5595 Natasha_Smith@Ausaid.Gov.Au



Van den Berg, Caroline WSP-EAP Jakarta Stock Exchange Bld. Tower 2, 13Fl. Jl. Jend. Sudirman Kav.52-53 Jakarta 12190, Indonesia Tel. (62-21) 5299 3170 cvandenberg@worldbank.org



WSP-EAP

Jakarta Stock Exchange Bld. Tower 2, 13Fl.
Jl. Jend. Sudirman Kav.52-53
Jakarta 12190, Indonesia

Tel. (62-21) 5299 3173
nmukherjee@worldbank.org

Mukherjee, Nilanjana



WSP-EAP

Jakarta Stock Exchange Bld. Tower 2, 13Fl.

Jl. Jend. Sudirman Kav.52-53

Jakarta 12190, Indonesia

Tel. (62-21) 5299 3172

rjosodipoero@worldbank.org

Ratna I. Indrawati



Pollard, Richard WSP-EAP Jakarta Stock Exchange Bld. Tower 2, 13Fl. Jl. Jend. Sudirman Kav.52-53 Jakarta 12190, Indonesia Tel. (62-21) 5299 3180 rpollard@worldbank.org



Hopkins, Richard
WSP-EAP
Jakarta Stock Exchange Bld. Tower 2, 13Fl.
Jl. Jend. Sudirman Kav.52-53
Jakarta 12190, Indonesia
Tel. (62-21) 5299 3174
rhopkins@worldbank.org



Lambertus, Alfred WSP-EAP Jakarta Stock Exchange Bld. Tower 2, 13Fl. Jl. Jend. Sudirman Kav.52-53 Jakarta 12190, Indonesia Tel. (62-21) 5299 3171 alambertus@worldbank.org



WSP-EAP

Jakarta Stock Exchange Bld. Tower 2, 13Fl.
Jl. Jend. Sudirman Kav.52-53

Jakarta 12190, Indonesia

Tel. (62-21) 392 539 / 5299 3179

siskandar@worldbank.org



WSP-EAP

Jakarta Stock Exchange Bld. Tower 2, 13Fl.
Jl. Jend. Sudirman Kav.52-53

Jakarta 12190, Indonesia

Tel. (62-21) 392 5395 / 5299 3179

rwalujan@worldbank.org



Hard, Allen
Facilitator
PO Box 89, Batesville,
VA 22924, USA
Wah4K@Virgina.Edu

Iskandar, Sofyan



Gross, Bruce WSP-EAP Consultant 1624 Argonne Place Washington DC 20009 bgross@worldbank.org

Walujan, Ruth



Water and Sanitation Program East Asia and the Pacific

Jakarta Stock Exchange Building Tower 2, 13th floor

Jl. Jenderal Sudirman Kav. 52-53, SCBD

Jakarta 12190, Indonesia Phone: (62-21) 5299-3003 Fax: (62-21) 5299-3004 Website: http://www.wsp.org

An international partnership to help the poor gain sustained access to improved water supply and sanitation services. The program's main funding patners are the governments of Australia, Belgium, Canada, Denmark, Germany, Italy, Luxemburg, The Netherlands, Norway, Sweden, Switzerland, and the United Kingdom, The United Nations Development Programme and the World Bank