

**Stakeholder Analysis**

PAGASA	NIA	NIA DAM OPERATOR	NPC	NPC DAM OPERATOR	DPWH	NWRB	OCD	JOIMC	BENEFICIARIES
To provide information (forecasts/warning) for public safety & protection of properties.	Provide continuous services to the farmers and flood prone areas	Operation and maintenance of Mega and Pantabangan dams & FFWSDO facilities	To provide reliable and safety electricity	Operate warning console and monitor rainfall and reservoir elevation	To provide flood control structures	Policy formulation on water resources management	Formulation of comprehensive Disaster Management Program	Oversees the operation of monitored reservoirs for Flood Forecasting & Warning (FFW) purposes	Public Information Drives
Focal agency for Joint Operation & Management Committee for FFWSDO				To manage flood inflow to the reservoir	Implements flood control projects	Water resources regulation	OCD disseminates PAGASA FFWSDO Flood Warning Bulletins to RDCCs, DCCs, OCD Regional Centers & offices via fax, SMS & e-mails	Coordinates activities relative to FFWS, i.e. Information & Education Campaign (IEC), Public Information Drive (PID)	People living on the d/s areas of the dams
				Forewarn people downstream of impending water release from dams	Setting flood prone areas and implementing countermeasures	Economic regulation on water resources utility			
				Coordinate with PAGASA & other concerned agencies (Re: Dam & flood warning operation)	Making plan for flood mitigation for each river	Monitoring of water resources development			

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PAGASA	NIA	NIA DAM OPERATOR	NPC	NPC DAM OPERATOR	DPWH	NWRB	OCD	JOMC	BENEFICIARIES
E-governance is not yet fully supported		No good exchange of information with PAGASA	There is no regulator for dam activities	No good inflow/forecast model		Lack of expertise & tools to respond on the challenges of Extreme Climate Events (ECEs) and climate change	Communication channels to local DCCs or areas to be affected	Lack of institutional mandate	No LGU representatives here
Minimal financial support for research & development		Lack of upgraded facilities	Lack of coordination with PAGASA, NWRB, OCD	Limited knowledge in flood forecasting				Regular meeting should be every month and not "as the need arises". No permanent/regular members attending the meeting	Low acceptance of Flood Bulletins/Warnings due to lack of understanding/knowledge on the terminology used (too technical terms)
Inadequate telecom network (backbone) for FFWS		Lack of good communication facilities	Lack of information	Sometimes directly involved personnel were not the one sent for proper training					
Weak/absence of telecom links between PAGASA & dam operators		Needs training		Manpower capability (Training/info)/lack of training					
Outdated & obsolete telecom equipment				Lack of operation staff					
Communication links with other government agencies are lacking									
Information & Education Campaign (IEC) should be enhanced									

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PAGASA	NIA	NIA DAM OPERATOR	NPC	NPC DAM OPERATOR	DPWH	NWRB	OCD	JOMC	BENEFICIARIES
Diminished manpower work dedication	Lack of sufficient funds	Old equipment & personnel	No forecast from PAGASA (Rain)	Difficulty to operate dams based on the regulation	No clear link between flood control activities and non-structural measures	Lack of coordination with dam operators due to lack of institutional set-up among the concerned agencies	Public misunderstanding of dam operation as being blame for flooding	No operational budget	People living on the downstream areas of the dams have low acceptance/understanding of warning
Not enough Hydrologists & Telecom Engineers		No comfortable service vehicle		Conflicting interests by stakeholders affect the decision of dam operators	Limited communication link with PAGASA and Dam Operators especially during spillway operation	Non-compliance with decisions/activities by dam operators		Absence of Rule Curves of some dams	Misinformation
Lack of qualified manpower, state of the art equipment				No available spare parts on JRC equipment	Overlapping mandates with FCSEC and BRS	Weak forecasting system		Concerned members are not attending meeting on a regular basis	
Trained personnel go abroad for greener pasture (Brain Drain)				Outdated river profiles	No clear link between FRWSDO, JOMC and FCSEC	Limited budget			
Logistics support for maintenance is lacking				Frequency interference on communication facilities	Difficult to make good plan for flood mitigation				
Inadequate budget for maintenance, travel & spare parts				Worn out patrol vehicles (some are unserviceable)					
Lack of proper maintenance vehicles				Communication facilities					
National policy on frequency use is lacking				Aging equipment					
Pfiterages at remote facilities				Limited budget					

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# Problem Analysis

2007.11.9

**CORE  
PROBLEM**

The Flood Forecasting & Warning System for Dam Operation does not work properly and effectively.

**DIRECT  
CAUSE**

Reliable Observation Data (Rainfall & River flow) are not obtained (timely).

Correct Forecasting result (Rainfall & River flow) are not obtained (timely).

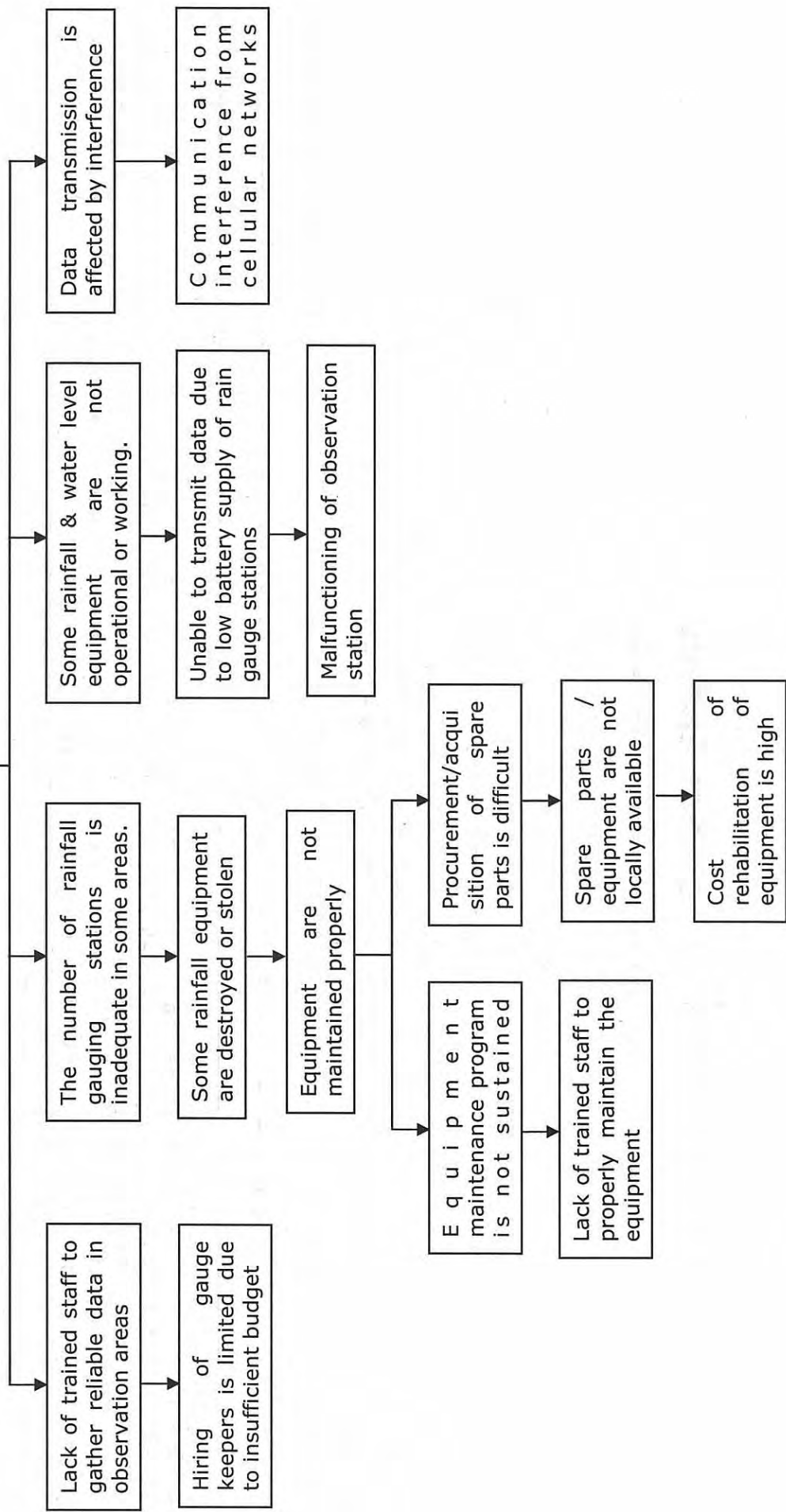
Gate operation activities are not carried out properly.

Discharge/Flood Warnings are not issued properly and timely.

Public awareness among stakeholder is weak.

Weak institutional set-up among concerned agencies.

**Reliable observation data (Rainfall and River Flow) are not obtained (timely).**



**Correct Forecasting Results are not obtained (timely)**

Forecasting models are not calibrated.

Data base management is not in place.

Data assimilation techniques are not developed.

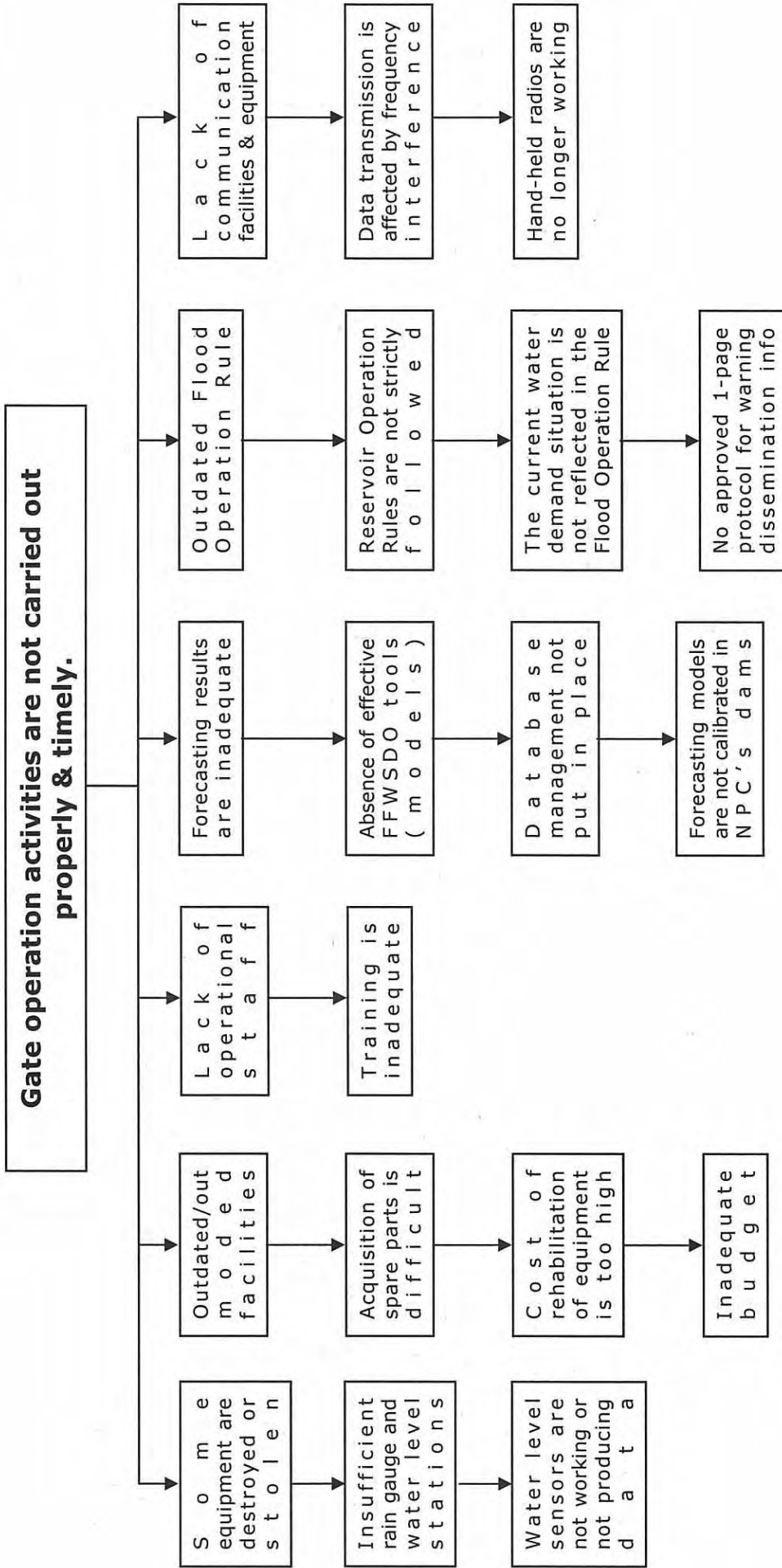
Data processing equipment is insufficient.

Forecasting tools and data processing techniques are not developed or adapted.

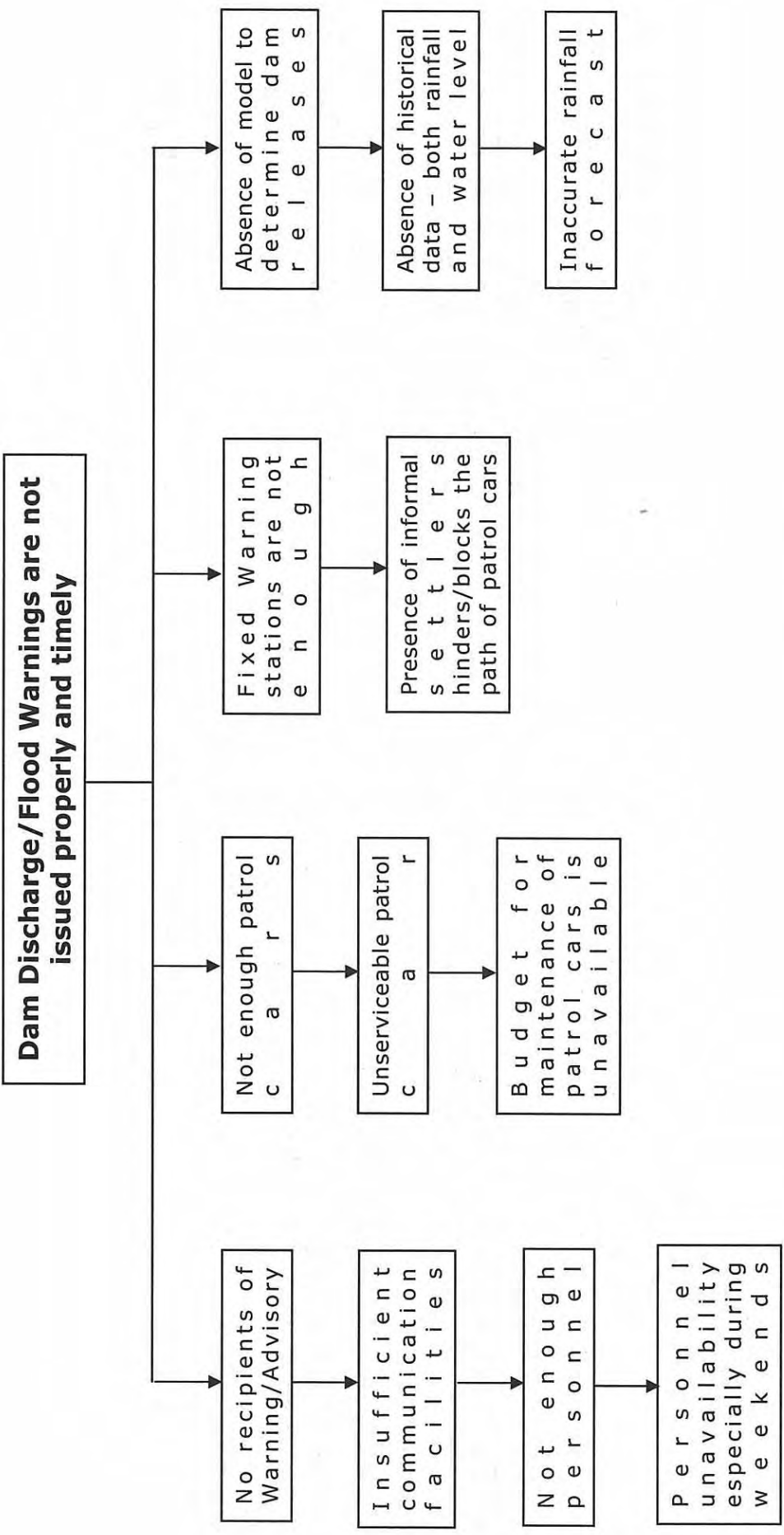
Access to new technology is limited.

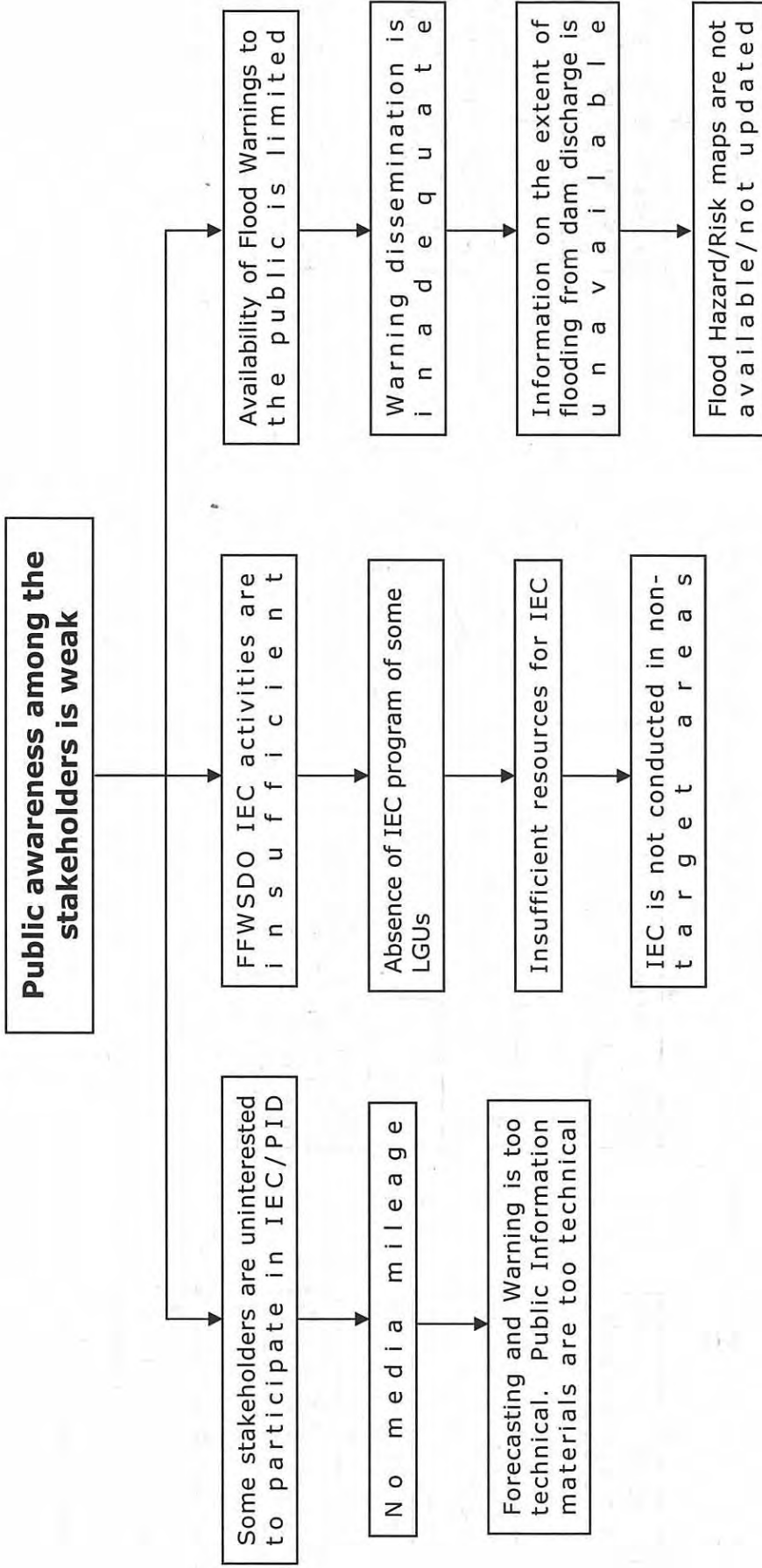
Training of FFWSDO personnel on operational forecasting tools is inadequate.

Trained/Skilled personnel to undertake dam operation activities is inadequate.

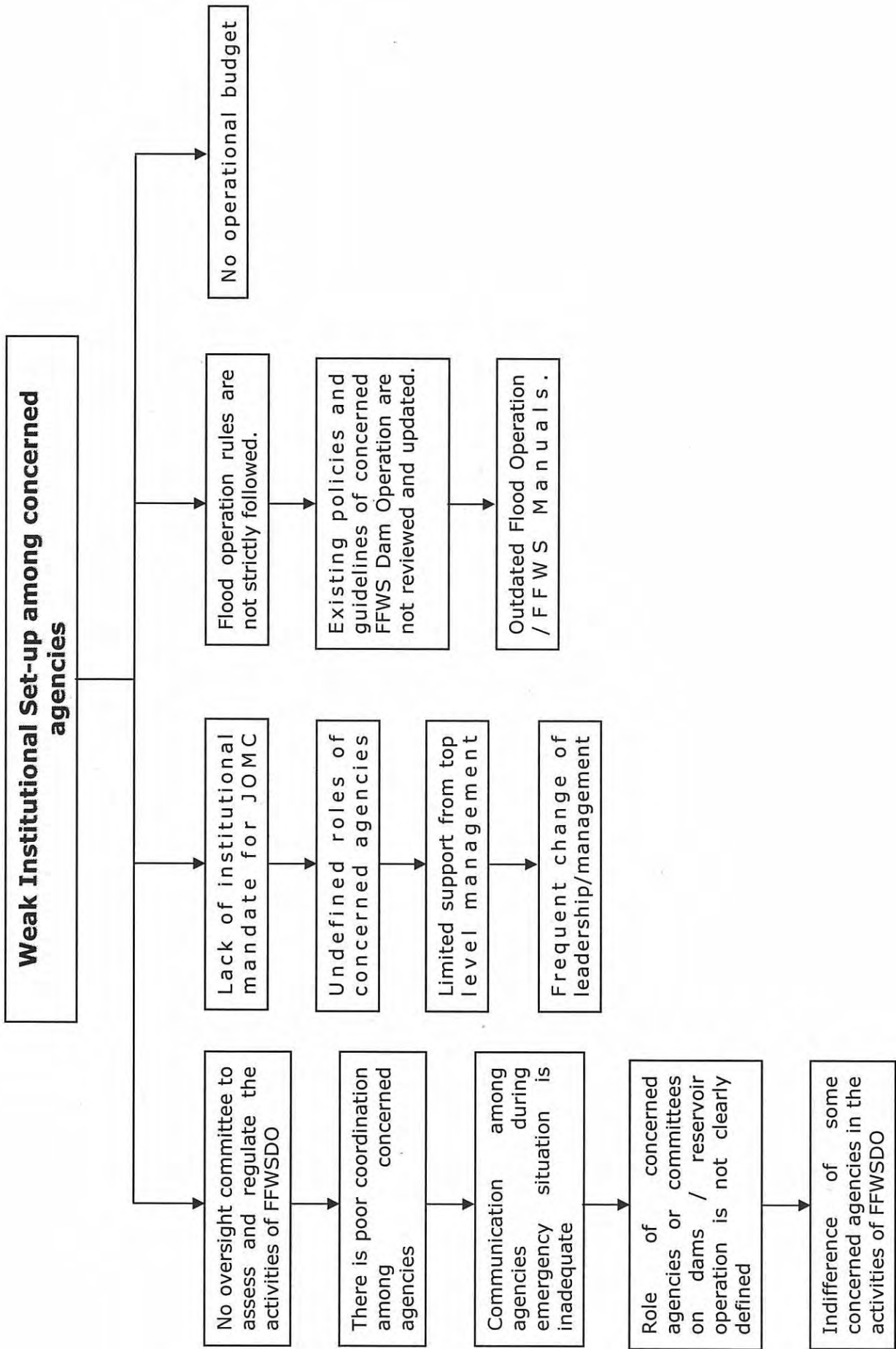








Note:  
 IEC – Information and Education Campaign  
 PID – Public Information Drive  
 LGU – Local Government Units





# **PCM**

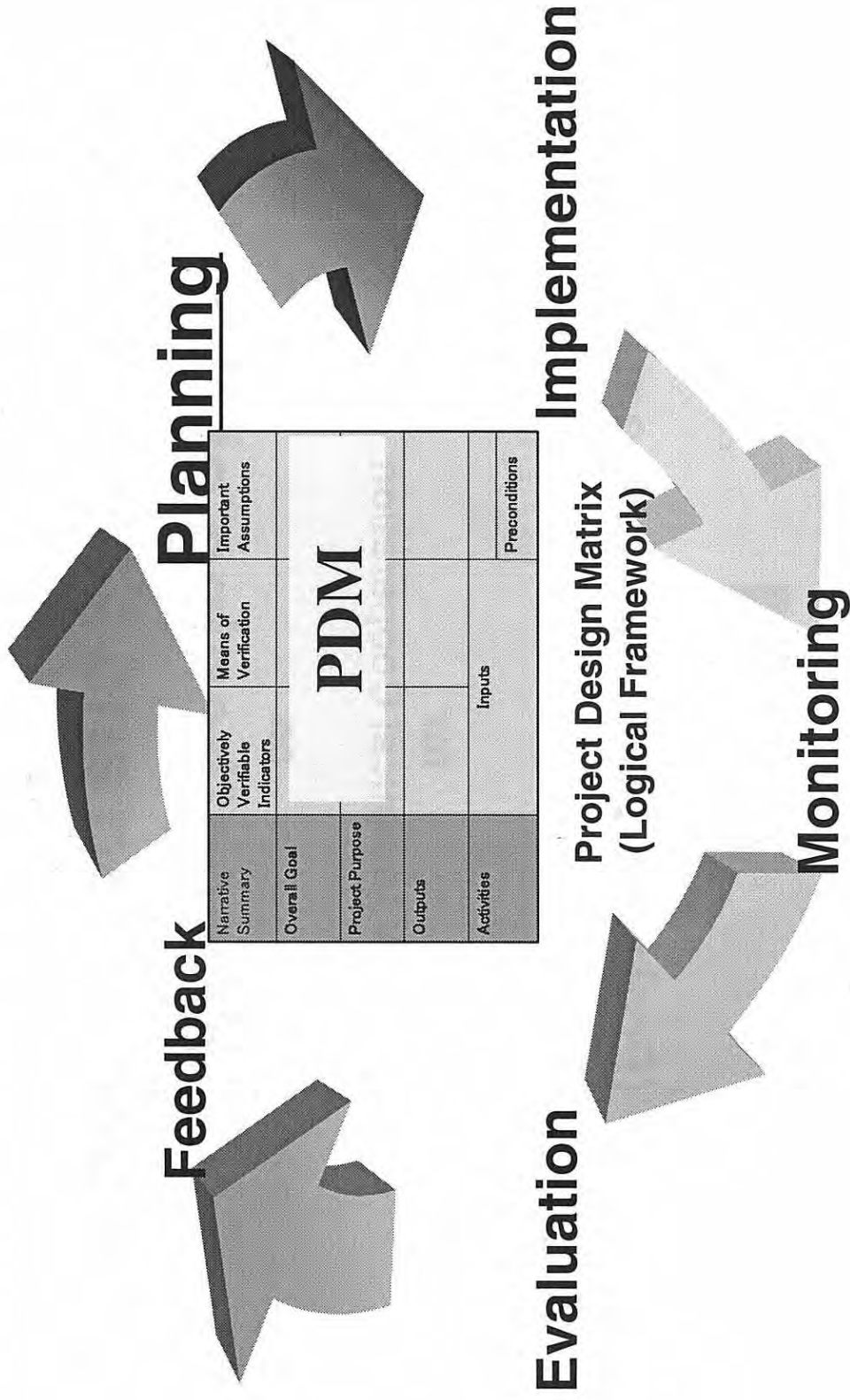
**(Project Cycle Management)**

**for  
JICA Technical Cooperation**

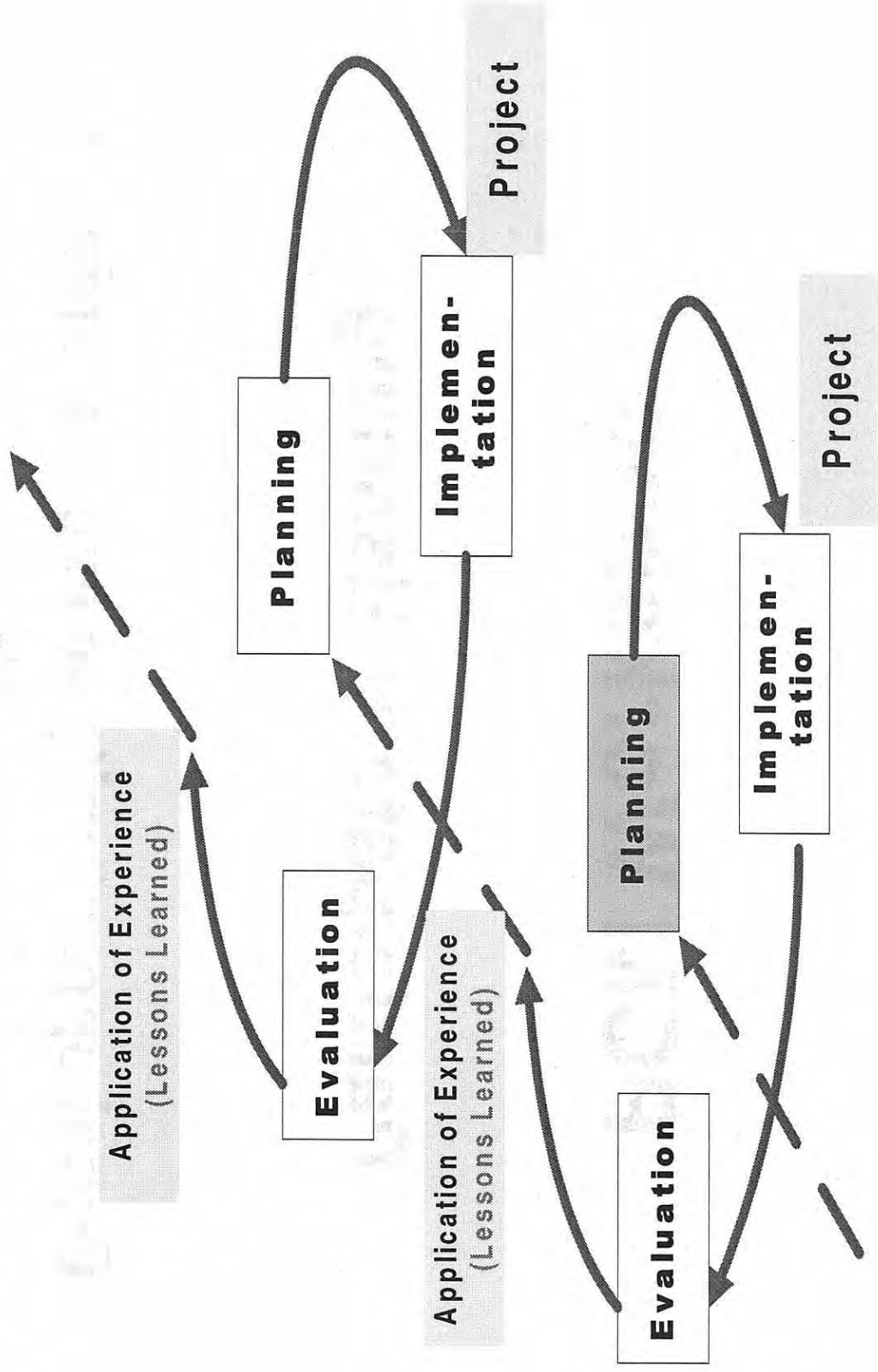
**on  
Strengthening of  
Food Forecasting and Warning System  
for  
Dam Operation**

9th November 2007  
JICA Preliminary Study Mission

# PCM (Project Cycle Management) with PDM (Project Design Matrix)



# Project Cycle & Feedback of Experience



# **PCM Workshop**

## **Participatory Planning**

**Equal opportunity to express opinions  
and  
play primary roles in planning**



# PCM Workshop

- Why it's "Workshop" ?

Planning is not done  
by someone working at a desk alone,  
but by Representatives of  
both the donor and recipient sides in meetings  
those are called "workshops".

# **Self Introduction**

## **Participatory Planning Workshop**

Name, Age, Position, Assignment,  
etc.

# **PCM Workshop Rules**

- 1. Write your own statement on a card**
- 2. Write only one idea on one card**
- 3. Express your statement in a simple sentence**
- 4. Stick to the facts and avoid generalizations**
- 5. Make your statement specific**
- 6. Write cards first before beginning discussion**

# Traffic Sign Cards



**Doubts regarding the content of card**



**Lack of Information  
(Required further investigation)**



**Dis-agreement, conflict, or  
controversy**



**Not required further discussion or  
analysis  
(Because "taboos", being  
overstepped, ...)**

# Process of PCM Workshop

Stakeholder Analysis



Problem Analysis

Core Problem

Direct Cause

Detailed analysis of problem



Objective Analysis



Priority

# **STEP 1**

## **Stakeholders Analysis**

### **Identify**

the strength, weakness, needs and problems through analyzing the related residents, organizations and agencies

# Stakeholders Analysis

## <Stakeholder>

<b>PAGASA</b>	<b>NIA Dam Operator</b>	<b>NPD Dam Operator</b>	<b>DPWH NWRB OCD MMDA</b>	<b>JOMC</b>	<b>Final Benefici aries</b>
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## <Detailed Analysis>

<b>Basic Information</b>	<b>Needs &amp; Interests</b>	<b>Mandate &amp; Role</b>	<b>Strength &amp; Resources</b>	<b>Weakness</b>	<b>Problems</b>
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# **STEP 2**

## **Problems Analysis**

Identify  
the causes and effects of existing problems  
in the target area  
in the form of a Problem Tree.

This process begins with selection of  
Core Problem and Direct Causes

Describe negative situation



# Writing Cards

Avoid writing "No Solution/Resource"

Not enough stuff in  
my department

Not enough stuff do not  
maintain equipment & facilities

Describe "direct cause" first

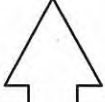
Operation manuals are  
not updated

Operation manuals does not match  
the current situation

# Writing Cards

Do not write a Cause and Effect  
on one card

Equipment is not  
improved, so rainfall data  
is not reliable



Equipment is not improve

Rainfall data is not reliable

# **STEP 3**

## **Objectives Analysis**

Clarifies the "means-ends" relationship  
between the desirable situation  
and the solutions

Converting negative situation  
in a problem tree  
into positive future situation

# **STEP 4**

## **Project Selection**

A process to select a project from result of the Objectives Analysis

The objectives tree includes all of the means necessary for achieving the core objective

Today, to give the priority to the means

# **PCM Workshop Rules**

- Write Cards First
- One idea - One card
- Simple Sentence
- Facts & no Generalizations
  - Specific

