

# POST DISASTER ASSESSMENT GUIDANCE FRAMEWORK IN DIFFERENT SECTORS

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**Abstract** - It is a coordinating approach, objective tool, comprehensive method for post disaster management, for recovery and losses needs, and a paving method for a secured recovery framework, including psychosocial care for human recovery needs in different aspects. The main target of these tools is provided a systematic mechanism based on scientific measurements handling post disaster needs assessment recovery and reconstruction for long terms.

**Key Words:** Post disaster assessment, different sectors and targeting risk reduction measures, Guidelines in case of post disaster needs, WHO health system Framework, PDNA tools in India

## 1. INTRODUCTION

It is used as a significant investigating tool for finding out the resources for calculating recovering needs and care. UN development group, the World Bank and European Union developed a programme named as post disaster needs assessment (NDPA) in 2008. The main purpose of NDPA designed for purpose restoring the damaged infrastructure, houses, livelihood services, and other social system and reducing the risk of future disaster. PDNA (post disaster recovery needs assessment) framework purpose addressing help for recovery attempts across different sectors and targeting risk reduction measures.



Image: 1

Guidelines in case of post disaster needs and care in different sectors:

- i. Culture
- ii. Community Infrastructure
- iii. Health and psychosocial care
- iv. Gender
- v. Water and sanitation

- vi. Transportation
- vii. Environment

## 2. HEALTH SECTOR FRAMEWORK SYSTEM GUIDANCE

Health sector provides a guidance for PDNA assessment in case of health sector, by thorough study of the assessment issues that need to be guided or assessed. It is work as matrix analysis that guides the team of assessment, changes due to epidemiology that overtake burden of disease, loss and damage assessment, main health operation and six building blocks health framework.

According to WHO health sector addressing all health aspects which consists all organization and people, balancing and curing health. WHO provided health framework in the form of six-building blocks given as in figure 1.

**WHO health system Framework:**

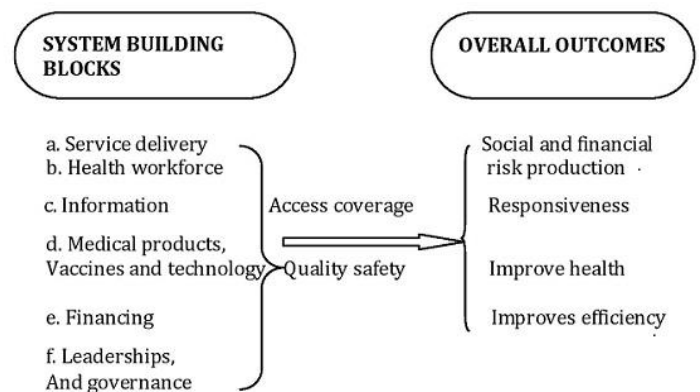


Figure: 1

As shown in above figure1 each building blocks under taken some elements of assessment included following examples:

- a. **Service delivery:** essential services availability and accessibility, safety and quality measures, services packages, management units, proper organization, pre- hospital facility, mobile clinic etc.
- b. **Health workforce:** supervision facility, workers for health care, investment policies, workforce plans for investment and polices etc.

- c. **Information:** decision making, surveillance facility, population information facility etc.
- d. **Medical products, vaccine and technology:** vaccine and urgent medical products facility, policies, medical transport system, norms, drug donation, safety measures etc.
- e. **Financing:** pay ability, service costing, national financial policies etc.
- f. **Leadership and governance:** Balancing co-ordination system, regulation, policies in health sector etc.

There are some sub-sectors provided by WHO under the building block first according to which, there are a minimum number of services should be available for recovery and relief phase given as:

- i. Child health and nutrition
- ii. Communicable disease
- iii. Environmental health
- iv. General services for clinical purpose
- v. Non-communicable disease including mental health and injuries etc.
- vi. Sexual & re-productive health (as maternal and newborn health issues /clinical management for sexual violence/ HIV/Aids etc.)

These subsectors provided a systematic guidance assessment for pre -existing disease problems corresponding to each sub-sector.

### 3. CULTURE SECTOR FRAMEWORK SYSTEM GUIDANCE

The main target of the culture PNDA assessment to pinpoint the people affected by the disaster, causes arose by the disaster that inter-relate the affected people and the cultural sector, well planned safety measures with long term recovery policy.

The PNDA culture sector focused identification of risk in culture caused by the disaster or arises by the other sectors reconstruction and associate methods for sector recovery and support in general.

Culture guidance team should be well known about the cultural attribute and phrases in the disaster affected area, relationship between property the livelihood, bonding between cultural aspects and sustainable development.

It is assumed that the PNDA assessment in culture sector still in its early age, but furthermore it's believed that in future it will enriched and able to provide the significant well conceptual framework that elaborate the benefit of culture to human establishment and from further knowledge earned by the case studies tools used in post disaster conditions.

### 4. COMMUNITY INFRASTRUCTURE SECTOR GUIDANCE

Community infrastructure particularly addresses the small-scale basic structures, technological related facility and the system that construct on the basis of community that are unable to balance for livelihood and lives of the people living in the community.



Image: 2

There are some aspects on which PDNA assessment for community infrastructures provide support and guidance to the community given as:

- i. A well-defined assessment of the nature, studied of the region under which community infrastructures get break down, types and impact of the disaster on the community infrastructures.
- ii. Recovery and reconstruction planned measurement under community co-ordination support.
- iii. Community infrastructures systematic measurement based on consequence scale.
- iv. Planning and management on the basis of community.
- v. Well skilled and knowledge especially in architecture and engineering field.

### 5. GENDER SECTOR FRAMEWORK SYSTEM GUIDANCE

It is cross-cutting sector to deal with disaster assessment. Gender is a sensitive dealing subject for the Post disaster assessment. Post disaster assessment has impacts in different phases on women, girls, boys and men. They faced unexpected problems with different capacities and resources during disaster.

The gender sector guidance target to suggest practical advice for joining the national and international gender experts in PDNA and provides knowledge how to deal with identification and integration for gender equality corresponding to the sectors during disaster along with the elements of PDNA as:

- i. Basic information of pre-disaster.
- ii. Disaster effects.
- iii. Loss and damage economic value estimation process.

- iv. Disaster's effects and impact on economy and human development, reconstruction and recovery survey and estimation, added built back better (BBR) and its economic value.

## 6. WATER AND SANITATION SECTOR GUIDANCE

The water and sanitation or WASH post disaster assessment aim to target the problems arises by the disaster and sum-up these issues with the help of WASH assessment.

Rapid recovery is much essential to balancing the health of population, back community on the track of normal existence and assisting. Infrastructures and services recovery provide helps to communities reconnecting, and their involvement participation work as spirit of recovery and capture their life in mind of population effected.



Image: 3

Renewal facilities for services delivery needs recovery in other water and sanitation assessment (WASH) sector's elements such as: maintenance approaches, well defined management operation for ensuring the recovery for beneficially need. Somehow disaster provides a chance or opportunity to change and recover these problems with more sustainable solutions over of old methods in WASH assessment in urban and rural populations. This can show a new path of guidance and improvement of human and economic development.

Following guidelines are providing by the WASH assessment and in WASH response areas as:

- a) Hygiene promotion
- b) Sanitation, excreta disposal
- c) Solid waste management (sanitation, non-hazardous added medical waste)
- d) Water supply
- e) Vector control and drainage
- f) Water resources schemes
- g) Protection of water resources
- h) Education in the field of water supply and sanitation, hygiene/ health issues

Since WASH targets the solution on water supply and well-being somewhere it also improved other quality of life

components as education, safety and livelihood. Somehow it provides linkage to all sectors services and deliveries which are one or another way depends on good working of WASH sector.

## 7. TRANSPORT SECTOR SYSTEM FRAMEWORK GUIDANCE

Other than all sectors this transport sector and its physical value, infrastructure and vehicles damage, shows a destructive change in its flow. Because of this transport sector shows a deficiency in production and high economic value of production. Members of transport sector assessment team visit the effective sites and keenly observe essential impact of disaster on effective areas and should be take action to assets the arise problems in transport system which work as second phase of assessment.

There is some important point to study the effects of disaster and should be collected as first stage of assessment given as:

- a) Location and capacities of each type of transport sub system and its important components.
- b) Stocks of vehicles which are available in every sub system at that time and its capacities/ numbers.
- c) Approximate cost of every mode of transport and vehicles comes under different category.
- d) Annually Performance reports of vehicle either private or public transport sector.

All this information regarding to transport sector provides by the ministry of public or transport with respective to different mode of transport departments as road, railway, airport and ports etc.

This PNDA aims to washout the problems arise during disaster on transport system with accurate recovery and reconstruction in transport sector. The PNDA provides the assessment methodology and application for study the disaster's economic and social impact on transport system, and estimates the needs for recover the post disaster impact on transport.

## 8. ENVIRONMENT SECTOR SYSTEM FRAMEWORK GUIDANCE

Targeted motive of PDA environment sector is constructed a well plan strategy how to guide and recovers the environment and natural resources causes due to disaster. This recovery strategy work as a disaster risk reduction plan and provides helps to building the environment elements and natural resources due to disaster.

All sector either in form of social or economic affected by the environment impacts and because of the cross-cutting nature of environment sector, it is essential to PDA environment assessment team should work keenly with other sectors assessment teams. With the coordination work

with other teams provide help to avoid the repetition of calculation and observation of disaster impacts.



**Image: 4**

The provided guideline provides help in post disaster methodology and provides strength in estimation needs for the recovery in human development; strengthen the institutional and governance aspects, environment disaster risk reduction scenario and assist Impacts arise by post disaster condition.

Following are the points to needed at the time of work exercise for environment assessment as:

- i. Disaster type, its geographical capacity and potency.
- ii. Disaster's impact on population and division according based upon sex and age in affected areas.
- iii. Essential environment elements and services typically provided in each territory.
- iv. Main localities and different institution involved with environment governance.
- v. Participation of Stake holders provides help in rescue and relief operation.
- vi. Total of all PDA timeline guidance and help scope,
- vii. Required data collection with possible sources.
- viii. Work with other sectoral assessment team in triangular format to avoid the repetition and duplication information of data.
- ix. Construct maps based on the available data information, satellite-based images and local area knowledge.
- x. Find out the area affected by the disaster in severe most, note down the changes in infrastructures due to disaster.

At the time of assessment, the team should prepare a meeting at least in once a day and share the information and key points to identify any other gaps or problems due to disaster and should prepared the next day work plan strategy.

## RESULTS AND DISCUSSION

In the present time, countries have deliberately space applications and many innovative technological ways to improving the post disaster situations. Satellite imaginary system and GPS provides effective and potential full approaches and work as key note for developing new modules, tools and new approaches for rapid assessment. It

works well and provides accurate and relevant information corresponds to geographical location under natural disaster impacts including preliminary measurement for human and physical values due to damage.

**PDNA tools in India:** NIDM (national institute of disaster management), Ministry of home affairs, Indian government developed post disaster needs assessment tools for India with National cyclone risk mitigation project abet by World Bank. The main target of these tools is provided a systematic mechanism based on scientific measurements handling post disaster needs assessment recovery and reconstruction for long terms. In India PDNA constructed based on the best running international application and based on local conditions customization, which is capable in-depth analysis of disaster impacts and effects.

## CONCLUSIONS

On the basis of size, topography and population density, vulnerability based, situation based on geopolitical factor and other social-economic conditions the Asian countries are quite sundry. For improving disaster risk reduction and rebuilt infrastructures, there is need to be construct a systematic and scientific method for assessment of infrastructures due to disaster damages, recovery issues arise by disasters and psychosocial needs and care in the affected region.

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