

*CAPACITY BUILDING AND TECHNOLOGY TRANSFER IN
SUPPORTING DEVELOPING COUNTRIES*

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Abstract

Meteorology science is a science which uses advanced technology in providing meteorological information for different socio-economic sectors. Both surface and upper air observation requires advanced technologies which is not easily accessible and too much costly for developing countries to purchase it.

To increase the reliability and usefulness of meteorology science in developing nations in currently changing both economic and environment, the collaboration between developed and developing countries are mandatory. Because without providing necessary capacity building and technology transfer between developing and developed nations, the probability of getting reliable and relevant meteorological information or data is difficult. The problems of getting reliable and correct meteorological information lead loss of life and affect economic activities of any country. Additionally, without having correct meteorological data, the research activities performed in the area of changing climatic factors, different meteorological related research will be under question.

To tackle currently changing climatic problems all over the worlds, sustainable and reliable ways of capacity building technology transfer must be established for supporting developing nations.

To provide reliable meteorological information basically for developing countries, the supports provided by developed nation interims of capacity building and technology exchange have greater position.

To provide meteorological service for publics as much as possible for different socio-economic activities in developing countries, the

collaboration of WMO and other international organization is very important in both capacity building and technology transfer.

Generally, the major objective of this paper is:

- ❖ To address better understanding the collaboration between WMO and meteorological and Hydrological centers
- ❖ To facilitate way of exchanging technology and Knowledge which enables to provide meteorological information for publics
- ❖ To facilitate ways of exchanging best practices and lessons learned for effective use of meteorological and hydrological information, which is very important for enhancing economic activities of developing nation.
- ❖ To address way of getting and utilizing necessary capacity building and technology exchange support from developed nation in the area of meteorological and Hydrological service
- ❖ To address ways of strengthening strategic partnership among WMO and regional as well as national meteorological centers.

CAPACITY BUILDING/DEVELOPMENT

Capacity development is an approach or process through which poverty reduction will be achieved. Capacity building involves ways of improving performance at different levels.

To provide meteorological information both for local publics and to exchange the information at all corner of the world, the provision meteorological related capacity building programs held by WMO as well as international organization are significantly important. For example, in providing different kinds of capacity building, WMO have significant poison for our country Ethiopia.

The major objectives of capacity building provided by WMO for different developing country meteorological centers can be either of the following:

- ◆ To enhance meteorological skills of its member states
- ◆ To strengthen understanding and relationships between WMO and regional as well as national meteorological centers
- ◆ To build capacity of local or national meteorological centers in providing reliable meteorological information for decision and policy makers. Because decision and policy established without consideration of meteorological information is useless basically in currently changing environment.

Mechanism to deliver capacity development programs

- ❖ Through provision of basic meteorological equipments
- ❖ Through provision of technical advisor
- ❖ Through provision of training to enhance capability of member state in providing reliable meteorological information
- ❖ Through provision long term and short term human resource development programs
- ❖ Enhancing research activities and network project
- ❖ Improving capacity of all meteorological and hydrological organization to effectively design, initiate and implement partnership for sustainable development
- ❖ Promoting strengthen intra -regional networking between meteorological centers

- ❖ Promoting exchange of meteorological information between meteorological and hydrological centers.

Technology Transfer

The developed countries can provides practical steps in promoting, facilitating and financing sound technologies and know how for developing countries.

The extent to which developing countries effectively implement their commitment depends on the effective implementation by developed countries in providing their commitment related to financial resources and technology transfer.

Decision to be considered in transferring technology for developing Country

- ◆ Complete survey of technology
- ◆ Identification of Option
- ◆ Support capacity building activities related to technology transfer
- ◆ Identifying capability of user and establishing necessary capacity development programs through which limitation will be avoided

The Technology Transferring Framework

Scholars have identified five key teams and areas of technology transferring as follow:

- ✚ Technology needs and needs Assessments
- ✚ Technology Information
- ✚ Enabling environment
- ✚ Capacity building
- ✚ Mechanisms for technology transfer

Major technology transfer barriers for developing countries are:

- ❖ Lack of data, information, knowledge, awareness
- ❖ High transaction costs
- ❖ Inadequate access to capital
- ❖ Poor understating of local needs

Therefore, both developing countries as well as developed countries have responsibility to tackle these problems.

Conclusion and Recommendation

To overcome the currently changing weather situation all over the world, the collaboration interim of both capacity building and technology transfer between developed and developing nation is mandatory.

The collaboration should be continual and uninterrupted to have common understanding about currently climate change all over the world.

However, only capacity building and technology transferring mechanism is not sufficient to attain required results. So both developing countries and developed nations should have responsibility for having controlling mechanism which helps to determine whether required result is attained or not.

Mostly, developing leaders are responsible to evaluate their performance attained after having the required capacity building and technologies for their effective performance in providing reliable weather information for public. In addition, the developing country must identify the necessary type's capacity building and technologies enable them to provide reliable weather situation.