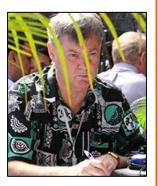
THE EXCHANGE SERIES ON CLIMATE ADAPTATION



E-DISCUSSION REPORT — CONSOLIDATED REPLIES The 3rd Exchange Series on Climate Change Adaptation

Topic: Is 'resilience' an operational alternative to 'adaptation'?



The 3rd Exchange was raised by Dr. Peter King on 10 March 2014 to engage the APAN climate change adaptation community in Asia and the Pacific. The Exchange period lasted approximately four weeks (10 Mar – 2 Apr 2014).

Dr. King is the Senior
Policy Advisor at the
Institute for Global
Environmental Strategies
(IGES) Regional Centre
based in Bangkok,
Thailand. He is also the
Adaptation Project
Preparation and Finance
Team Leader for the
USAID Adapt Asia-Pacific
project.

<u>Dr. Peter King</u>, Senior Policy Advisor, <u>Institute for Global Environmental</u> <u>Strategies (IGES)</u> Regional Centre, Bangkok, Thailand (Posted on 18 Apr 2014)

Dear friends and colleagues,

Thank you for following this recent Exchange and contributing actively to the email discussion centered on the question: Is 'resilience' an operational alternative to 'adaptation'?

Over the past four weeks, we have received many insightful contributions from government climate change offices in Vietnam, Nepal and Palau, from think-tanks in Japan and the United States, and from environmental practitioners in the Philippines, Thailand, and across the region.

To recap, below are the questions I had raised:

- 1. What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?
- 2. Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?
- 3. As 'adaptation' financing is meant to be 'new and additional', is the adoption of the resilience framework simply a way of ensuring that existing Official Development Assistance can be used for adaptation projects?
- 4. In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

It is clear, from this discussion and within this community of practice, that there is little consensus in the conceptual understanding between 'resilience' and 'adaptation'. In searching for a working definition, community members have used a variety of research traditions, practices, and perspectives to better understand and make sense of the two terms.

Contributors from the APAN Community to the 3rd Exchange (10 Mar – 2 Apr 2014).

- 1. Elmer Mercado, Environmental Planner based in the Philippines (Posted on 11 Mar 2014)
- 2. Bhuban Karki, Under Secretary, Ministry of Finance, Nepal (Posted on 12 Mar 2014)
- 3. Apichai Sunchindah, Bangkok, Thailand (Posted on 13 Mar 2014)
- 4. Regan Suzuki, The
 Center for People
 and Forests
 (RECOFTC), Bangkok,
 Thailand (Posted on
 14 Mar 2014)
- 5. Akhteruzzaman
 Sano, Save the Earth
 Cambodia (Posted 17
 Mar 2014)
- 6. Dr. Peter King, Senior Policy Advisor, Institute for Global Environmental Strategies (IGES) Regional Centre, Bangkok, Thailand (Posted on 26 Mar 2014)
- 7. Tomi Haryadi, The Center for People and Forests (RECOFTC), Bangkok, Thailand (Posted on 27 Mar 2014)
- 8. Bhuban Karki, Under Secretary, Ministry of Finance, Nepal (Posted on 27 Mar 2014)

For some, 'resilience' suggests reverting back to an original state, while 'adaptation' refers to a more transformative process. Others have noted that the terms are often interchangeably used, with 'resilience' used more loosely as a convenient synonym for adaptive capacity. And still there are many who pointed out that 'resilience' and 'adaptation' are conceptually very different.

Despite the differences, however, there appears to be a degree of uniformity in the understanding of the two terms emerging from the discussion – and it is broadly in line with the IPCC's definition of 'resilience' and 'adaptation.'

'Resilience' is akin to an *ability* – the ability to absorb, to cope, and to endure disturbances brought about by climate change, while 'adaptation' refers to a *process* – the process of adjusting human systems to climate change impacts that cannot be absorbed. The IPCC's full working definition is available in my earlier <u>post</u>.

Indeed these questions deserve greater attention among practitioners as they have significant implications to the wider practice, and even financing, of climate change adaptation. If climate finance is to be "new and additional" then there is a justifiable concern that funding "resilience" may be used by donor countries to blur the distinction between Official Development Assistance and climate finance. I hope this Exchange has prompted a deeper reflection of these issues and that you have found this exercise to be useful for your professional endeavor.

The APAN Knowledge Management team will consider all the inputs received and look into possibly developing a more in-depth analysis of this discussion.

Once again, thank you for your insightful contributions – and until the next Exchange, I wish you all the best.

Dr. Peter N. King Senior Policy AdvisorInstitute for Global Environmental Strategies (IGES)
Regional Centre
Bangkok, Thailand

<u>Elmer Mercado</u>, Environmental Planner based in the Philippines (Posted on 11 Mar 2014)

Hi Peter,

I'm Elmer Mercado. I'm an environmental planner in the Philippines and have been involved in a lot of work with our local government units (LGUs) in terms of integrating climate resiliency and disaster risk adaptation in their local plans. My own thoughts and lessons learned

9. Ky Quang Vinh,
Director, Climate
Change Coordination
Office of Can Tho
City, Vietnam (Posted
on 28 Mar 2014)

10. Moushumi
Chaudhury,
Associate,
Vulnerability &
Adaptation Initiative,
World Resources
Institute,
Washington, DC,
United States (Posted
on 31 Mar 2014)

- 11. Judy L. Dean, Grant Coordinator, Office of the President, Republic of Palau (Posted on 31 Mar 2014)
- 12. Dr. Peter King, Senior Policy Advisor, Institute for Global Environmental Strategies (IGES) Regional Centre, Bangkok, Thailand (Posted on 1 Apr 2014)
- 13. Binaya Raj Shivakoti,
 Water Resources
 Specialist, Institute
 for Global
 Environmental
 Strategies (IGES),
 Hayama, Japan
 (Posted on 1 Apr
 2014)
- 14. Shom Teoh,
 Programme
 Manager,
 Sustainable Cities,
 Institute for Global
 Environmental
 Strategies (IGES)
 based in Bangkok,
 Thailand (Posted on 2
 Apr 2014)

from our engagement with our LGUs here are:

Climate 'adaptation' and 'resilience' are indeed used inter-changeably here in the Philippines. In fact, more basic than that 'resilience' or 'adaptation' to disaster and/or climate change is also used 'inter-changeably'. These show that there is still a lot of confusion or mixed application of the terms 'adaptation' and 'resilience'.

Operationally, climate resilience and disaster resilience is seem as one and the same (since most of the disaster preparedness done by our LGUs are tied to climate-related events, i.e. typhoons, storm surge, flashflood, droughts, and the like). So on a practical and site-level application...'resilience' and 'adaptation' measures and actions are the same.

Sufficiency of coverage of 'adaptation' for climate change planning? Or better 'resilience'? I think both principles are being applied simultaneously or in parallel in the Philippines depending on who is assisting or facilitating the planning for our LGUs. In the end, many of the so-called 'resilience' plans can be classified as 'adaptation' plans and vice versa. Our dilemma, which we have been advocating, with our national policy makers and climate change bodies, is to present a 'standard' (for lack of a better term) tool or methodology in the preparation of 'climate resilient' and/or 'climate adaptation' plans. At the moment, there is no such 'standard' to differentiate both as well as guide local stakeholders in planning.

Adaptation financing in the Philippines is still a largely locally/nationally funded arrangement. Whilst there are a lot of ODA funding for 'adaptation financing' (i.e. institutional) it still in its infancy. Most adaptation financing are individual-based and traditional risk insurance.

Personally and current trend in the Philippines is to go for 'resilience' which is broad in scope and perspective.

Thanks and cheers!

Elmer S. Mercado, EnP

Email: elmer sm@yahoo.com

Back to Top

Bhuban Karki, **Under Secretary, Ministry of Finance, Nepal** (*Posted on 12 Mar 2014*)

Dr. King's questions are very interesting. It is not my official position, but my personal views. I think adaptation are *post* and resilience are *pre* events.

For instance if there is an erratic rainfall or flash floods or drought then

15. Elmer Mercado, Environmental Planner based in the Philippines (Posted on 2 Apr 2014)

you need to adapt, and 'resilience' is your preparedness to face these events in terms of developing climate resilient seeds, housing, power plants, irrigation systems, diseases, etc. Thus, 'adaptation' is not sufficient to cover all elements of climate change aspects in planning.

About financing, adaptation is surely new and additional financing window on top of existing ODA flow. And as I mentioned above, climate 'resilience' is not an operational alternative to 'adaptation'.

Bhuban Karki Under Secretary

Ministry of Finance, Nepal Email: bkarki@mof.gov.np

Back to Top

Apichai Sunchindah, Bangkok, Thailand (Posted on 13 Mar 2014)

Dear Peter and all,

Based on Andrew Zolli and Ann Marie Healy who co-wrote the book entitled "Resilience" in 2012, they defined "resilience" not necessarily with respect to climate change but quite broadly, as "the capacity of a system, enterprise, or a person to maintain its core purpose and integrity in the face of dramatically changed circumstances."

They went on to say that to improve one's resilience is to enhance one's "adaptive capacity," in other words, "the ability to adapt to changed circumstances while fulfilling one's core purpose." What they meant by this is the "ability to resist being pushed from your preferred valley, while expanding the range of alternatives that you can embrace if you need to."

So it seems that they use the two terms in question rather interchangeably unless I miss out on some fine point in the use of the English language!

Apichai Sunchindah Bangkok, Thailand

Email: apichai sun@yahoo.com

Back to Top

Regan Suzuki, The Center for People and Forests (RECOFTC), Bangkok, Thailand (Posted on 14 Mar 2014)

Hello Peter,

Thank you for initiating this discussion – one which has not only practical and financing implications but fundamental conceptual and even

philosophical significance. Organizations such as RECOFTC are in the process of working through what such definitional questions mean for our work, operationally and in terms of our positioning as a rights-based organization supporting enhanced capacities for the involvement of local communities in managing forest landscapes.

The following are my personal thoughts and are not RECOFTC's institutional position.

While it is easy for us to use resilience and adaptive capacity interchangeably, they are not the same and there are pitfalls to neglecting the specific meanings of each. Resilience comes from systems research and implies a reversion back to an original state or structure. Adaptive capacity suggests an ability for transformation in the face of positive or negative changes – however, there is not the assumption of reverting back to an original state. Adapting to climate change, to social or economic pressures, may lead to an entirely new state – and this is not to be confused with an undesirable system collapse.

Given the origins of resilience thinking in the context of ecological systems, one might think that it would be an appropriate lens to view community forestry (CF). However, upon reflection, I would suggest it is not an entirely appropriate model conceptually for either the social or the ecological dimensions of CF in a context of climate change. First, from a social perspective, referring to the resilience of indigenous people living in forest areas for example, the logically desired outcome would be a reversion to a 'pre-disturbance' baseline state. As those familiar with sociology and anthropology will note, cultures are never static and the fluid and constant changes of any society or culture are both inevitable and a fundamental right. Adaptation is applicable, resilience I would think less so.

In the context of forest ecosystems, the other dimension of the community forestry equation, resilience might appear to be a more suitable conceptual framework. This too however seems questionable upon closer examination. Ecosystem resilience here implies retaining or reverting back to the baseline ecosystem or forest type (for example a dry broadleaf forest type). Surely, in the short-term measures can be taken to support resilience of such ecosystems to withstand some degree of temperature and precipitation pattern change and retain the original/ baseline ecosystem. However, in the longer-term, with anticipated temperature changes in a number of Mekong Basin hotspots of 4-6 degrees C by 2050 (according to ARCC Impact Report), ensuring retention of original ecosystems is simply unrealistic. We must accept that longterm there will be shifts in ecozones and forest ecosystem types. Thus, resilience in its true sense would seem equally un-viable here, with emphasis on adaptation and strengthening of associated adaptive capacity appearing to be the only practical, feasible and rights-based approach.

Thanks for getting us thinking!

Best wishes,

Regan Suzuki

The Center for People and Forests (RECOFTC)

Bangkok, Thailand

Email: regan@recoftc.org

Back to Top

Akhteruzzaman Sano, Save the Earth Cambodia (Posted 17 Mar 2014)

Thanks for the email and giving us such a great venue. We would be happy to collaborate based on the opportunities. Please see below the answers to the questions:

What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?

We see 'adaptation' and 'resilience' as very near active agents. It is something 'a school teacher' – may represent as 'adaptation' where the 'headmaster' of the school may represent the 'resilience'. What I mean here is, adaptation becomes the part of resilience. We cannot make a community 'resilient' if there are no adaptation activities in place/practice.

Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?

No, I think climate change adaptation planning is a part of key few elements of adaptation. It should cover comprehensively. No, I don't think so.

As 'adaptation' financing is meant to be 'new and additional', is the adoption of the resilience framework simply a way of ensuring that existing Official Development Assistance can be used for adaptation projects?

Yes, it can be. It depends to which contexts and extents ODA is proposed. I think this is the key challenging area, where most of the experts do 'mistake' or 'wrongly interpret' that sometimes increase vulnerability of communities and institutions.

In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

No.

Hope the answers help somehow.

Kind regards,

Akhteruzzaman Sano Management Advisor

Save the Earth Cambodia

E-mail: director@savetheearthcambodia.org; sano.stec@gmail.com

Website: www.savetheearthcambodia.org

Back to Top

<u>Dr. Peter King</u>, Senior Policy Advisor, Institute for Global Environmental Strategies (IGES) Regional Centre, Bangkok, Thailand (Posted on 26 Mar 2014)

Dear colleagues and friends,

As a contribution to the debate, please see the glossary of terms from the Intergovernmental Panel on Climate Change (IPCC):

Adaptation: Adjustment in natural or **human systems** in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities. Various types of adaptation can be distinguished, including anticipatory, autonomous and planned adaptation:

- Anticipatory adaptation Adaptation that takes place before impacts of climate change are observed. Also referred to as proactive adaptation.
- Autonomous adaptation Adaptation that does not constitute a
 conscious response to climatic stimuli but is triggered by
 ecological changes in natural systems and by market or
 welfare changes in human systems. Also referred to as
 spontaneous adaptation.
- **Planned adaptation** Adaptation that is the result of a deliberate policy decision, based on an awareness that conditions have changed or are about to change and that action is required to return to, maintain, or achieve a desired state.

Resilience: The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and change.

Is the significant difference the ability of adaptation to change to a new condition or to "achieve a desired state", whereas resilience is the ability to return to "the same basic structure and ways of functioning?"

In other words, adaptation assumes that resilience may not be enough and it may be necessary to move to a different state. For example, resilience to sea level rise might involve raising houses above the high water level or simply placing a barrier on the door frame to prevent seawater incursion; while adaptation may require moving the house inland. What do you think?

Dr. Peter N. King
Senior Policy Advisor
Institute for Global Environmental Strategies (IGES)
Regional Centre
Bangkok, Thailand

Back to Top

<u>Tomi Haryadi</u>, The Center for People and Forests (RECOFTC), Bangkok, Thailand (Posted on 27 Mar 2014)

This would be my personal opinion, not representing the view of the organization I am associated with.

What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you work under? Are they the same or different?

In my personal opinion, adaptation will refer to adjustment to the nature or human changes that has the impact of changes of climate pattern while the resilience referred to the ability of community to absorb the impact of climate change hazards. They are slightly different in a sense that adaptation refer to the process of adjustment while resilience more on the ability itself. In many cases, both terms are being used interchangeably and may be interpreted as similar things.

Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?

I think it really depends on how countries or communities apply their climate change adaptation strategies and contingencies. It may or may not cover all essential elements, depending on the given situation and the impact of the climate change itself.

In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

It probably can be interpreted that way, depending on the given situation, assuming that increasing resilience may provide adaptation options, leading to lowering vulnerability.

Tomi Haryadi

Project Coordinator

ASEAN-Swiss Partnership on Social Forestry and Climate Change (ASFCC) The Center for People and Forests (RECOFTC)

Bangkok, Thailand

Email: tomi.haryadi@recoftc.org

Back to Top

Bhuban Karki, Under Secretary, Ministry of Finance, Nepal (Posted on 27 Mar 2014)

Dear Mr. King,

I agree with the glossary from the Intergovernmental Panel except "Autonomous adaptation". To me it should be "Automatic adaptation".

Regards,

Bhuban Karki Under Secretary

Ministry of Finance, Nepal Email: bkarki@mof.gov.np

Back to Top

Ky Quang Vinh, Director, Climate Change Coordination Office of Can Tho City, Vietnam (*Posted on 28 Mar 2014*)

Dear Dr. Peter King,

I have some discussion with your questions as following:

1. What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?

In my opinion two terms are different, "adaptation" implies passive in finding a way to overcome difficulties in life, when disasters occur you will try to find out the ways to live. But "resilience" implies more proactive in dealing with the impending difficulties in your life. You prepare yourself to have strong potential immediately after a disaster occurs, you can stand and pass quickly to their normal lives.

2. Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?

Climate change is uncertainty on both the time appears and dangerous levels, so we cannot make climate change adaptation planning. But we can ourselves make plan to strengthen our capacity to resilience to climate change.

3. As 'adaptation' financing is meant to be 'new and additional', is the adoption of the resilience framework simply a way of ensuring that existing Official Development Assistance can be used for adaptation projects?

Finance for adaptation are funds that used for disaster recovery and disaster damage settlement. Finance for resilience is the fund that used as an anticipatory investment, should normally be used in accordance with the principle of "no regrets", with or without climate change are put into effective use.

4. In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

As shown above, "adaptation" and "resilience" are two separate activities, although general purpose to protect people before disasters.

Best regards,

KYQUANGVINH

Director

Climate Change Coordination Office of Can Tho City, VN No 80 Phan Dình Phung street, Ninh kieu, Can Tho.

MP:+84 0907 619065

Email: kqvinh@ctu.edu.vn; vpbdkhct@cantho.gov.vn website: http://www.biendoikhihau.cantho.gov.vn/

Back to Top

<u>Moushumi Chaudhury</u>, Associate, Vulnerability & Adaptation Initiative, <u>World Resources Institute</u>, Washington, DC, United States (*Posted on 31 Mar 2014*)

Dear Dr. King,

Here are some responses from the World Resources Institute (WRI) on "adaptation" and "resilience":

1. What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?

My colleagues at WRI have differing points of view on the definitions of "adaptation" and "resilience. Here are a few:

- "Adaptation is a process. Resilience is not; it is a potential." Lars Laestadius
- Some prefer to use the IPCC definition:
 - Adaptation: Adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (IPCC 2001)
 - Resilience: Amount of change a system can undergo without changing state (IPCC 2001).
- "Adaptation is a change in thinking, acting or making decisions as a result of current or future climate change – this could be to avoid potential harm or reap potential benefits. There are a wide range of types of adaptation – some that are more closely linked to development and some that are more specific to particular climate impacts. Adaptation is not a static state that is reached after a shift in thinking, acting or decision making however; it is a dynamic state of being that requires constant monitoring and flexibility to change decisions under the uncertainty inherent in climate change." – Ayesha Dinshaw
- "Resilience is a measurable outcome of risk reduction." Vijay Jagannathan
- "Resilience is a broader term that is applicable beyond just the realm of climate change. The stricter definition that is more closely linked with the origins of resilience in Ecology refer to the capacity to absorb shocks and bounce back to the original state of well-being. However, climate change is not always manifested in shocks; sometimes it is slow change in trends. Additionally, often in developing countries the original state of well-being is simply not adequate, so bouncing back implies staying at the inequitable status-quo. That being said, people seem to be using the term resilience in a far looser way, and it seems to be used as a more viscerally-appealing word for adaptation, or a synonym for adaptive capacity, or simply as a catch-all phrase like 'sustainability'. As a working definition, I like the Rockefeller Foundation's principles of resilience: spare capacity, flexibility, limited or safe failure, rapid rebound and constant learning."-Ayesha Dinshaw

In my opinion, I believe resilience is tied to building adaptive capacity. If access to assets can be increased and institutions are strengthened to address climate variability, I believe that leads to resilience or stronger capacity to cope and adjust. The level of resilience is never static but can change with increase or decrease in adaptive capacity.

Best regards,

Moushumi Chaudhury, PhD Associate, Vulnerability & Adaptation Initiative

World Resources Institute 10 G St NE, Suite 800 Washington, DC 20002, USA Phone: +1 202 729 7849

Skype: Moushumi.Chaudhury

Website: www.wri.org Email: mchaudhury@wri.org

Back to Top

<u>Judy L. Dean</u>, Grant Coordinator, Office of the President, Republic of Palau (*Posted on 31 Mar 2014*)

What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you work under? Are they the same or different?

These are my personal thoughts: The term "resilience" imparts a sense of endurance. We strengthen our infrastructure, we educate our population, we take a stance with the aim of preserving our habitats, maintaining the status quo in the face of change of any kind. We build up our savings account so that we can endure times of economic hardship. As another example, for as long as we can remember, our coastlines have been resilient in that tidal fluctuations move sand from here to there, but in gradual and predictable ways that we are able to cope with. But climate change has imposed harsh and often unpredictable changes, requiring us to devise new strategies, to move in new directions, to adapt to sudden changes (sea level rise, saltwater intrusion, drought, typhoons). If the bank forecloses and we lose our entire savings account, then we have to adapt to the harsh realities of starting from scratch. If our coastlines are completely eroded as a result of climate change, we have to adapt by moving inland.

Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?

The term resilience conveys "predicting" and not necessarily "preventing," but adjusting from a position of strength to minimize the effects of change. The term "adaptation' conveys a radical change requiring carefully thought out measures to work around the situation for the best possible outcome.

In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

No, the words mean two different things.

Judy L. Dean, Grant Coordinator Grants Office

Office of the President Republic of Palau

Office at Ngerulmud, Melekeok Email: judyd@palaugov.org

Back to Top

<u>Dr. Peter King</u>, Senior Policy Advisor, Institute for Global Environmental Strategies (IGES) Regional Centre, Bangkok, Thailand (Posted on 1 Apr 2014)

For those interested in how the IPCC Fifth Assessment Report is treating the difference between 'adaptation' and 'resilience' take a look at the summary released last week at http://ipcc-wg2.gov/AR5/images/uploads/IPCC WG2AR5 SPM Approved.pdf

"Adaptation: The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects."

"Resilience: The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation."

"Prospects for climate-resilient pathways for sustainable development are related fundamentally to what the world accomplishes with climate-change mitigation (high confidence). Since mitigation reduces the rate as well as the magnitude of warming, it also increases the time available for adaptation to a particular level of climate change, potentially by several decades. Delaying mitigation actions may reduce options for climate-resilient pathways in the future."

Dr. Peter N. King Senior Policy Advisor

Institute for Global Environmental Strategies (IGES) Regional Centre Bangkok, Thailand

Back to Top

<u>Binaya Raj Shivakoti</u>, Water Resources Specialist, <u>Institute for Global</u> <u>Environmental Strategies (IGES)</u>, Hayama, Japan (*Posted on 1 Apr 2014*) Dear Peter,

This is Binaya from IGES, Natural Resources & Ecosystem Services (NRE) Area. I would like to share some of my personal views on the questions.

1. What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?

Both resilience and adaptation involves process and they are also time bound. In that sense they appear similar and often become a source of confusion when we consider about their operational implications to climate change problem. Theoretically they are different because resilient system could be considered adaptive but not necessarily vice-versa. Or, outcome of adaptation may or may not increase resilience. But for the durability of adaptation actions, it is desirable to enhance resilience simultaneously.

2. Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?

If adaptation is confined to predict and prevent, it is not sufficient. But if it is more than that and adopts a continuous process, it could be adequate to move ahead. Under the context of this question, building resilience is a clearer and sustainable alternative to 'predict and prevent' because human society has a tendency to preserve status quo as long as they fulfill their needs. Under climate change scenario it is still difficult to decide what can be preserved and what need to go through transformation/evolution to avoid a perish. This is the place where strategy like win-win or no/low regret strategy are handy and any start-up that put more weight on resilience has a good chance to become win-win or no/low regret.

3. As 'adaptation' financing is meant to be 'new and additional', is the adoption of the resilience framework simply a way of ensuring that existing Official Development Assistance can be used for adaptation projects?

Many of the ODA could be under risk if they did not take into account climate uncertainty. This is a current reality. So climate consideration, in other words adaptation, is already implicit in that. New and additional, probably borrowed out of influence from mitigation projects like CDM, is difficult to digest in the context of adaptation. So I agree using resilience framework could be a risk reduction strategy of ODA and hence could be well streamlined under adaptation financing.

4. In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

It can be or cannot be!! It simply depends on the kind of intervention sought.

Thank you.

Best regards,

Binaya Raj SHIVAKOTI, Dr. Eng. Water Resources Specialist

Natural Resources & Ecosystem Services Institute for Global Environmental Strategies (IGES)

Hayama, Japan

E-mail: shivakoti@iges.or.jp; tobinaya@gmail.com

Website: www.iges.or.jp

Back to Top

Shom Teoh, Programme Manager, Sustainable Cities, Institute for Global Environmental Strategies (IGES) based in Bangkok, Thailand (Posted on 2 Apr 2014)

Dear Peter and colleagues,

Thank you very much – your sharing has really enriched my own thoughts about 'resilience' and 'adaptation'. It was really interesting to see interpretations of these terms by individuals with different 'lenses', such as ecology, psychology, policymaker and practitioner. Each appears to impart certain connotations to these terms. However, from the discussions I detected two strands of sentiment.

The first strand leans to preservation and also implies that the original state (before disruptions and shocks are experienced) is desirable. This is perhaps amenable to human tendencies to cherish traditions, continuity and stability.

The second strand appears to embrace disruptions (uncertainty, change, etc.) as a given, and is open to more drastic changes and transformation to alternative desirable states. The normative postures (what is 'good' and 'desirable') of each differ. In a healthy, dynamic and sustainably developing society, probably both kinds of sentiments need to co-exist.

In practice, I am not sure if there could be significant differences between 'resilience' and 'adaptation'. They seem to be mutually encompassing. In a perpetually changing world, 'resilience' cannot be achieved without acts of adaptation, especially small ones. In the very long run, though, absolute resilience may be possible, since nothing lasts forever. On the other hand, acts of adaptation — especially at a minor scale and gradual pace — naturally contributes towards the resilience of an entity, until the limits of human-determined adaptation are breached.

Another point that came up is the multi-scale and temporal aspect of resilience and adaptation. Within an entity or society, many agents and groups with different levels of vulnerability interact to contribute towards an 'overall resilience'. How much adaptation or change, and at what pace, should happen among these groups so that 'overall resilience' is strengthened, and 'adaptation' does not lead to disintegration?

Taking a broader view, I think both resilience and adaptation should not be an exclusive new 'frames' of financing projects, but need to be meaningfully related back to the fundamental precepts of sustainable development. It is not enough to differentiate the resilience of human (socio-economic) and natural (environment) systems, but to recognise that both systems are intricately intertwined and interdependent. Tensions of time, scale and uneven dispositions need to be resolved through inclusive dialogue to make policy decisions legitimate.

In the context of 'resilient' cities, these are two thoughts:

- It seems that the discourse and practical interpretation is very much still confined to resiliency and adaptation to climate-related disasters, as mentioned by Mr. Elmer Mercado. There is room to broaden this to the idea of cities as living, inter-connected socio-ecological systems, rather than bounded areas of political administration. With this, urban-rural linkages need more careful consideration than before.
- 'Resilience' still lacks a docking point within most existing national and local institutional structures, especially for trans-boundary challenges, so new structures will need to be developed and experimented with. Resiliency concepts and frameworks may be meaningfully integrated into formal land use planning and land allocation processes (in many cities, these two aren't necessarily connected) in line with sustainable development goals. This needs to be backed by legislation and adequate sharing of fiscal resources between central and local governments. Geospatial technical expertise and systems (mapping etc.) at sub-national levels need to be significantly strengthened.

Shom Teoh (Ms.)

Programme Manager, Sustainable Cities

Institute for Global Environmental Strategies (IGES)

Email: teoh@iges.or.jp
Website: www.iges.or.jp

Back to Top

<u>Elmer Mercado</u>, Environmental Planner based in the Philippines (Posted on 2 Apr 2014)

Hi Shom,

Thanks for your succinct summary. I agree with you on the need to expand our idea of resilience and adaptation through integration of cities as part of an "living, inter-connected socio-ecological systems, rather than bounded areas of political administration. With this, urban-rural linkages need more careful consideration than before." This has been our realisation in the Philippines that current emphasis for city or town-level climate resilience or adaptation plans cannot be isolated with resilience and adaptation plans being down by neighboring cities or towns, particularly those that share a common ecosystem or watershed. This is the reason why I've been personally pursuing integrated ecosystems (i.e. upland, lowland and coastal) management and planning (with the watershed or 'ridge-to-reef' as physical planning framework) not only for land use planning and resource use allocation but more so on local development planning and investment programming.

We have seen in the Philippines, particularly with our partner LGUs, that providing a broader planning perspective and 'point of view', which includes not only urban-rural linkages but also ecosystems linkages, strengthens vertical and horizontal integration of climate resilient and adaptation plans by individual cities and towns as well as their neighbors. It also becomes a platform for inter-LGU alliances and common resources sharing and mobilisation for climate resilient and adaptation measures/projects.

Elmer S. Mercado, EnP

Email: elmer sm@yahoo.com

Back to Top

The Exchange Series: Launch email posted on 10 March 2014

<u>Dr. Peter King</u>, Senior Policy Advisor, <u>Institute for Global Environmental</u> <u>Strategies (IGES)</u> Regional Centre, Bangkok, Thailand (Posted on 10 Mar 2014)

Dear colleagues and friends,

I am pleased to launch the third of an ongoing series of email discussions. What began as a pilot community of practice activity, supported by the USAID Adapt Asia-Pacific <u>project</u>, is now growing into a vibrant network of climate change adaptation (CCA) practitioners.

We started our conversation last year focusing <u>first</u> on 'country readiness' among Small Island Developing States in the Pacific and <u>second</u> on COP19, the Green Climate Fund and support from the private sector.

In the 3rd Exchange, I would like us to consider other CCA themes, not only climate finance. I have included in this email those who have been involved, both directly and broadly, with the <u>Asia Pacific Adaptation</u> Network (APAN) – to make this Exchange a wider APAN activity.

Since this is the first email exchange under APAN, let us bring our discussions back to basics and reconsider the terms – 'adaptation' and 'resilience' – that we commonly, and interchangeably, use in climate change. What exactly do we mean by these terms?

Below are some questions to guide our discussion:

- 1. What are some of the conceptual definitions of 'adaptation' and 'resilience' in relation to climate change that you or your organization(s) work under? Are they the same or different?
- 2. Is the term 'adaptation' sufficient to cover all essential elements of climate change adaptation planning? Or would it be more effective for actors to consider the problem as one of building 'resilience' (i.e. moving away from 'predict and prevent' approaches)?
- 3. As 'adaptation' financing is meant to be 'new and additional', is the adoption of the resilience framework simply a way of ensuring that existing Official Development Assistance can be used for adaptation projects?
- 4. In the end, is climate 'resilience' really an operational alternative to 'adaptation'?

All comments, thoughts and inputs are valuable and will, hopefully, bring greater clarity and help forge a better understanding of these key terms. I look forward to reading your responses.

Thank you.

Dr. Peter N. King
Senior Policy Advisor
Institute for Global Environmental Strategies (IGES)
Regional Centre
Bangkok, Thailand

Back to Top

Admin matters: For each <u>Exchange</u>, community members have about 3-4 weeks to share any thoughts, ideas, and experiences via <u>the-exchange@adapt-asia.org</u> with the group. At the end of the <u>Exchange</u> period, a consolidated summary of the discussion will be shared.

<u>The Exchange Series on Climate Change Adaptation</u> is facilitated by APAN Knowledge Management Team and supported by the <u>USAID Adapt Asia-Pacific project</u>. The team moderates the exchanges and ensures that members receive a maximum of one email a day. Messages posted reflect the personal views of the contributors and not the positions of their organizations.

If you would like to opt-out of the *Exchange* at any time, please contact Augustine Kwan, Knowledge and Outreach Manager at the APAN Regional Hub at kwan@iges.or.jp

The Exchange Series on Climate Change Adaptation is made possible by the generous support of the USAID Adapt Asia-Pacific project. Learn more about APAN and our partners by visiting: http://www.asiapacificadapt.net/

































Mobilising Knowledge and Building Capacities for Climate Resilience