

INDONESIA - INDIA  
HIGH LEVEL EXPERT EXCHANGE  
FISCAL MECHANISM FOR FOREST CONSERVATION  
SEPTEMBER 4<sup>TH</sup> - 8<sup>TH</sup> 2017



Research Center for Climate Change  
Universitas Indonesia

Published by:

Research Center for Climate Change University of Indonesia (RCCC UI)  
Gedung Pusat Administrasi Universitas It. 8,5 Kampus UI, Depok 16424  
tel : (021) 7867222 ext. 100347, (021) 60878040  
faks : (021) 71030606

Website:

<http://rccc.ui.ac.id>

In Cooperation with:

Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH  
Forests and Climate Change Programme (FORCLIME)

Photo credits:

RCCC UI photo collection

Printed and distributed by:

RCCC UI

Contact:

Dr. rer. pol. Sonny Mumbunan  
[sonny.mumbunan@ui.ac.id](mailto:sonny.mumbunan@ui.ac.id)

Jakarta, January 2018



CONTENT

4	Activities
5	Map
8	Summary and the follow up
12	Fiscal transfers in India and forest cover: Quotes from the report of the Finance Commission of India
16	Comparing India with Indonesia: Indicators and weights for fiscal transfers allocation
18	Testimonies
38	Profile of delegates

# Activities

## Day 1

Monday, September 4<sup>th</sup>, 2017

- Arrival in New Delhi

## Day 4

Thursday, September 7<sup>th</sup>, 2017

- Discussion with IORA Ecological Solutions in New Delhi
- Visit Taj Mahal in Agra, Uttar Pradesh

## Day 2

Tuesday, September 5<sup>th</sup>, 2017

- Travel to Dehradun in Uttharakand
- Visit to the Forest Research Institute (FRI)
- Visit to the Forest Survey of India (FSI)

## Day 5

Tuesday, September 8<sup>th</sup>, 2017

- Return to Jakarta

## Day 3

Wednesday, September 6<sup>th</sup>, 2017

- Travel to New Delhi
- Visit to the National Institute of Public Finance and Policy (NIPFP)
- Visit to the Ministry of Environment, Forestry and Climate Change (MEFCC) of India

## NEW DELHI

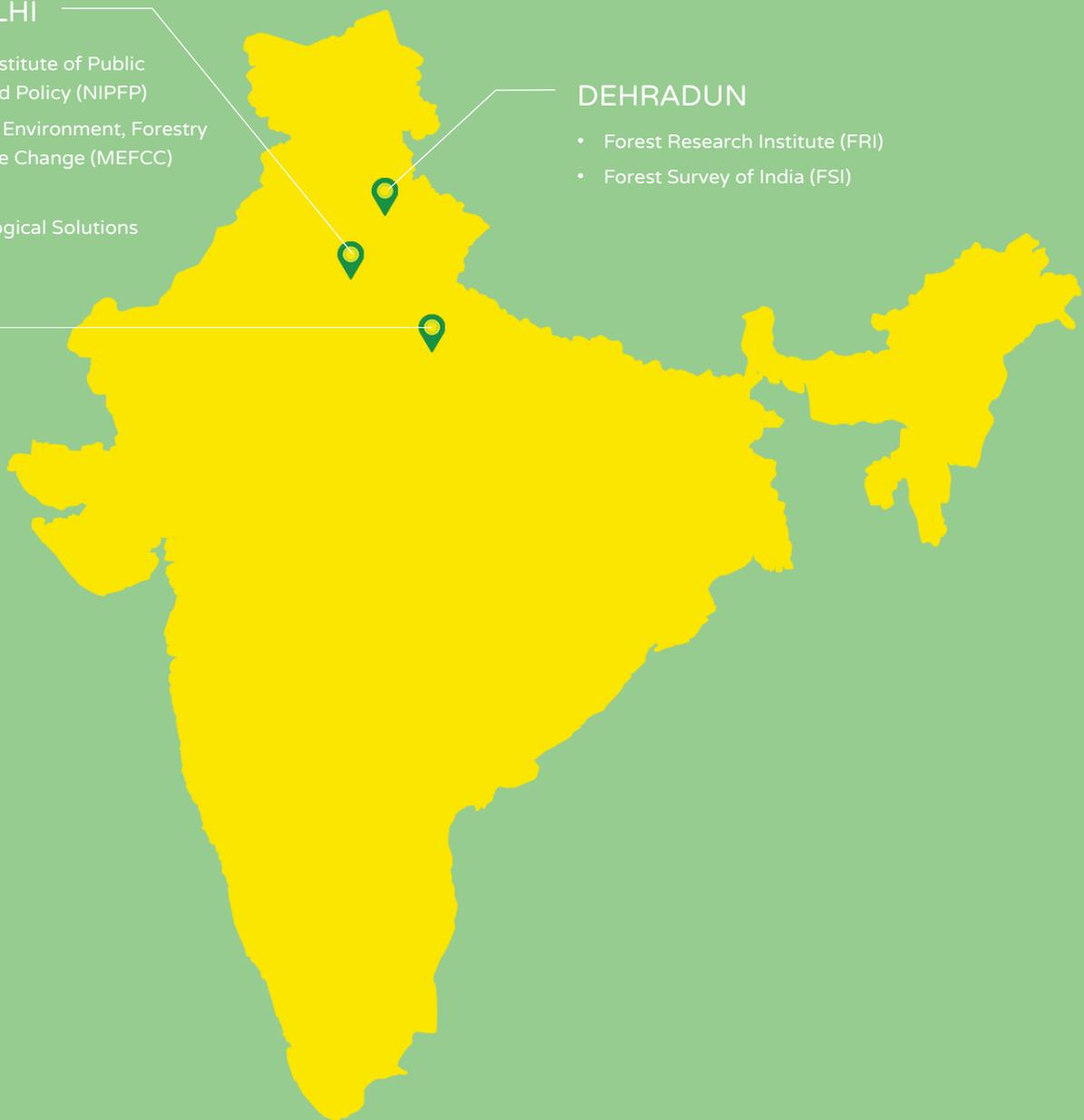
- National Institute of Public Finance and Policy (NIPFP)
- Ministry of Environment, Forestry and Climate Change (MEFCC) of India
- IORA Ecological Solutions

## DEHRADUN

- Forest Research Institute (FRI)
- Forest Survey of India (FSI)

## AGRA

- Taj Mahal







### INDONESIA-INDIA HIGH LEVEL EXPERT EXCHANGE ON FISCAL MECHANISM FOR FOREST CONSERVATION: A SUMMARY

#### GENERAL INFORMATION

The Indonesia-India High-Level Expert Exchange on Fiscal Mechanisms for Forest Conservation took place from September 4 to 8, 2017. The delegates from Indonesia consisted of members of the National House of Representatives, several high ranking or senior officials in the Ministry of Finance, Ministry of Environment and Forestry, and Ministry of National Development Planning (Bappenas), head and deputy head of forest-rich districts, and researchers from University of Indonesia and member of the Indonesian Academy of Sciences (AIPI). They visited India for the exchange. The Research Center for Climate Change at the University of Indonesia organized the exchange with the support of the German Government through the GIZ FORCLIME (Forest and Climate) Project.

India was chosen because of the country's fiscal innovations for forest conservation. In India, states receive fiscal transfers as part of its revenue sharing according to the area of forest of each state. The national government distributes funds to state governments based on forest cover along with other social, economic and demographic indicators. In the allocation of fund, forest cover represents 7.5% of overall weight (100%). With this new fiscal transfer scheme, it is estimated that states in India will receive an equivalent of 90 trillion Rupiah based on their forest cover. By 2020 that number is expected to increase to 160 trillion Rupiah. For a comparison, General Purpose Transfers (DAU) in Indonesia for 2017 was planned for 404 trillion Rupiah.

In the constitution of India, proposal to change public finance mechanism are proposed by a Finance Commission to the Prime Minister who then submits it to the Parliament for approval. The changes apply also to intergovernmental

transfers and revenue sharing between the national government and the states. The Finance Commission is formed every 5 years with mandates outlined in the Terms of Reference.

#### VISITS TO NEW DELHI, DEHRADUN AND UTTAR PRADESH

While in India, delegates visited, discussed and exchanged information and views with experts at several institutions, particularly in New Delhi and Dehradun, Uttarakhand. Delegates also visited cultural monument of Taj Mahal in the northern part of India, in Uttar Pradesh.

In New Delhi, delegates visited the National Institute of Public Finance and Policy (NIPFP) and obtained information and discussed with NIPFP Directors who were also members of the 14th Finance Commission. The Finance Commission continued to propose forest cover as one of the indicators of the transfer allocation from the central government to the states. Delegates gained exposure and understanding especially regarding arguments made from public finance that justifies the transfer mechanism for forest conservation. Further, the future of fiscal mechanism with forest cover indicator, whether it will endure or not over time, was explained during the visit to India's eminent public finance Institute. Delegates also had an overview of fiscal policy formulation and governance as well as about different roles of the Finance Commission, the Ministry of Finance and the Prime Minister's Office, in these fiscal matters.

Delegates visited the Ministry of Environment, Forest and Climate Change and held an informal discussion with staff and researchers at the ministry. Themes covered include activities in the forestry sector, both general and specific measures such as wildlife conservation in conservation forest areas. Funding for forestry-

related activities along with other funding schemes from domestic sources and overseas were also discussed during the visit. Part of the discussion included funding through transfers from the central government to the states to perform forest conservation activities.

Delegates also learned from the IORA Ecological Solutions, an independent private research institute in India. Together with the Forest Survey of India, IORA Ecological Solutions developed a set of indicators and instruments proposed for more effective fiscal federalism for forestry in India. In the proposal, IORA developed indicators for high conservation value forests. Delegates listened to the explanation of the instruments and indicators, and the evolution of policy proposals from the initial proposal which entailed several indicators to the final proposal of forest cover, one that is considered in the fiscal mechanism.

The visit in Dehradun, in the State of Uttarakhand, included two important and established forestry research institutes in India. The Forest Research Institute (FRI), which is part of the Indian Forest Research and Education Council and is structured under the Ministry of Environment, Forest and Climate Change, represents one of the oldest forestry research institutions in the world. The Indonesian delegates visited and enjoyed the collection of the FRI museum, exhibiting wood collections, non-timber forest products, pathology, entomology, and herbaria. The delegates discussed with FRI directors and scientists on the role that FRI have played in the formulation of forestry policy in India. The roles for science-policy included the involvement of FRI researchers in the analysis for drafting of the Nationally Determined Contribution (NDC) of India and specific roles of FRI in the analysis of fiscal policy for forestry sector.

Forest Survey of India (FSI) is another institution that delegates paid a visit during their time in Dehradun. They discussed with FSI Directors and researchers on the forest-related indicators and

formulas developed and proposed by the FSI to the 14th Finance Commission. Some of the proposed indicators and formula have underlaid the mechanism for which funds to the states are being allocated. Data quality of forest cover area was another important point of discussion. Quality data is critical in the integrity of fund allocation including data for forest cover performance for monitoring and evaluation purposes for the transfer of funds in the following year. In addition, on the occasion at FSI the delegates gained information regarding early forest fire warning system in India developed by the institute.

#### FOLLOW-UP PLAN

The high-level expert exchange between Indonesia and India on fiscal mechanisms for forest conservation plans for follow-up, especially in two areas.

- (1) Understanding the possibilities and limitations, including opportunities and challenges, of introducing fiscal mechanisms for forest conservation as being applied in India into the very context of Indonesia. Conducting specific studies to evaluate options for instruments, indicator, weight and source of funds for fiscal transfers for forest conservation purposes should be part of gaining better understanding.
- (2) Convening series of meeting that will be attended by representatives from forest-rich districts and provincial governments. The meetings should serve as forum for discussion, awareness building, and knowledge sharing on fiscal transfer schemes for forest conservation. Building upon these, representatives from sub-national governments should meet with the central government and line ministries and agencies to discuss about possibilities for an enhanced fiscal mechanism and policies that will benefit these districts and provinces, reasonable from public finance perspectives, while meeting the central government's commitment to forest protection.





## FISCAL TRANSFERS IN INDIA AND FOREST COVER: QUOTES FROM THE REPORT OF THE FINANCE COMMISSION OF INDIA

The 14th Finance Commission (or FC-XIV) was constituted by the President of India under Article 280 of the Constitution on 2 January 2013. The commission was mandated to make recommendations for the period 2015-2020. The following are relevant excerpts of the Report published in 2014 by FC-XIV related to fiscal transfers with forest cover indicator alongside considerations for fiscal (revenues and expenditures) and social-economic (such as poverty and declining capacities to perform public functions) issues.

” [The existing fiscal transfers recommended by the previous Finance Commission] had introduced a forward looking incentive based grant rewarding the States with forest cover and linking it to the quality of forests ”

- “Our ToR [the Terms of Reference for the 14th Finance Commission or the FC-XIV] has mandated us to consider the need to balance management of ecology, environment and climate change consistent with sustainable economic development. We recognize that this is a wide area with several dimensions. We have approached it from the fiscal perspective, in keeping with our primary mandate. The FC-XIII [the 13th Finance Commission that preceded the 14th Finance Commission] had introduced a forward

” Forests and the externalities arising from them impact both the revenue capacities and the expenditure needs of the States. (...) there is a need to address the concerns of people living in forest areas and ensure a desirable level of services for them. At the same time, it is necessary to compensate the decline in the revenues due to existing policy prescriptions.” ”

looking incentive based grant rewarding the States with forest cover and linking it to the quality of forests in a State. Forests and the externalities arising from them impact both the revenue capacities and the expenditure

” Analysis of the forest revenue shows that (...) the restriction on exploitation of forest resources resulted in an across the board reduction in forest revenues for States [that is, sub-national governments] in nominal terms. ”

needs of the States. We have noted that there is a need to address the concerns of people living in forest areas and ensure a desirable level of services for them. At the same time, it is necessary to compensate the decline in the revenues due to existing policy prescriptions. In our view, forests, a global public good, should not be seen as a handicap

” States [that is, sub-national governments] have an additional responsibility towards management of environment and climate change, while creating conditions for sustainable economic growth and development ”

but as a national resource to be preserved and expanded to full potential, including afforestation in degraded forests or forests with low density cover. Maintaining a green cover, and adding to it, would also enable the nation to meet its international obligations on environment related measures. We recognise that the States have to be enabled to contribute to this national endeavour and,

therefore, we are designing our approach to transfers accordingly.”

*Paragraph 2.33, page 18.*

- “Many States have raised concerns over declining revenue from forests due to the implementation of the National Forest Policy. The exploitation of forest resources, including felling of trees, can be carried out only on the basis of a centrally approved, scientific and sustainable regeneration plan. This, they have argued, has deprived the States with large forest cover of an important source of revenue. The States have suggested that these structural limitations in realising the

” Forests, a global public good, should not be seen as a handicap but as a national resource to be preserved and expanded to full potential, including afforestation in degraded forests or forests with low density cover. Maintaining a green cover, and adding to it, would also enable [India] to meet its international obligations on environment related measures

potential forest revenue should be taken into consideration while assessing revenues of the States. Analysis of the forest revenue shows that the receipts from these services are extremely volatile and the restriction on exploitation of forest resources resulted in an across the board reduction in forest revenues for States in nominal terms. Since the broad trend in forestry revenue shows a decline, we have projected this on the basis of the past trend growth rates.”

*Paragraph 7.24, page 81.*

”

The States [the sub-national governments] have to be enabled to contribute to this national endeavour [to meet India’s international obligations] and, therefore, we are designing our approach to transfers accordingly. ”

- “(...) to give consideration to the need to balance management of ecology, environment and climate change consistent with sustainable economic development while framing our recommendations (...). We recognise that States have an additional responsibility towards management of environment and climate change, while creating conditions for sustainable economic growth and development. Of these complex and multidimensional issues, we have addressed a key aspect, namely, forest cover, in the devolution formula. We believe that a large forest cover provides huge ecological benefits, but there is also an opportunity cost in terms of area not available for other economic activities and this also serves as an important indicator of fiscal disability. We have assigned 7.5 per cent weight to the forest cover.”

*Paragraph 8.27, page 18.*

”

A large forest cover provides huge ecological benefits, but there is also an opportunity cost in terms of area not available for other economic activities and this also serves as an important indicator of fiscal disability. We have assigned 7.5 per cent weight to the forest cover. ”





## COMPARING INDIA WITH INDONESIA: INDICATORS AND WEIGHTS FOR FISCAL TRANSFERS ALLOCATION

The indicators and weights assigned for determination of the shares of taxes to the States in India

Indicators	Weight (per cent)	
	States	
Population	17.5	
Demographic change	10	
Income distance	50	
Area	15	
Forest cover	7.5	

Source: Report of the 14th Finance Commission (2014)

The indicators and weights assigned for fiscal need calculation in the determination of general-purpose transfers (DAU) to the Provinces, Districts and Municipalities in Indonesia

Indicators	Weight (per cent)	
	Provinces	Districts/Municipalities
Population	30	30
Area*	15	13
Human Development	27	28
Cost	17	17
Regional gross domestic products/capita	11	12

Notes: \*Including marine area (40% and 45% for provinces and districts/municipalities, respectively). For general-purpose transfers in 2016.

# TESTIMONIES

## EVA SUNDARI

Member of National Parliament of the Republic of Indonesia, Commission XI on Finance, National Development Planning, Banking, and Non-bank Financial Institutions (Komisi XI, DPR RI)

The component of forest cover like that in Indian fiscal transfers is certainly feasible to be included into our DAU transfers (...) I would propose two strategies of implementation [for that feasibility]. The first strategy is to build a strong political commitment, before we delve into technical details. And in that regard, we do need a coherent legislation process, which is important as DPR RI is tasked to ensure that no legislations are disorganized, especially for issue as central as climate change (...). Only if these were in place then we could go further into details on how to integrate new indicators to the fiscal transfer formula.

The second strategy should take a different approach. The government of Indonesia may adopt the new indicators as we learned from India, incorporate them into our fiscal transfer formula and into our public budgeting. People, as well as the legislation process and political commitment that I mentioned will follow to that direction. Once adopted, I believe the way to community transformation and commitment to climate change and forest conservation is best crafted by incentivizing the people (...).

As for the exchange to India, organizers were friendly and responsive, yet we can better organize this by starting from looking at sort of thinking landscape before going into technical aspects. Organizers should provide orientation for participants prior to the exchange.



**EVA SUNDARI**

Member of National Parliament of the Republic of Indonesia, Commission XI on Finance, National Development Planning, Banking, and Non-bank Financial Institutions (Komisi XI, DPR RI)

## VIVA YOGA MAULADI

Member of National Parliament of the Republic of Indonesia, Commission IV on Agriculture, Food, Maritime, and Forestry (Komisi IV, DPR RI)

I gained a new perspective from India in terms of fiscal allocation for forest conservation. That is one of the main, and unfinished, problems for the Government of Indonesia. According to the Law, forest conservation is a responsibility assigned to the central government, yet forest goods are produced in provinces and districts. Now why is forest degrading so rapidly? Why does forest no longer provide additional economic benefits? First it is because local governments do not have enough money to preserve their forests. They could not allocate money for forest conservation into their budget spending. Most budget (up to 60 to 70 per cent) was spent on routine costs and the rest went to infrastructure and development. Second it is the mindset, that is local government think that forest conservation is the central government responsibility, and therefore not providing enough money at the local level for forest conservation.

At the same time, at the central level, the allocation for forest conservation remains unclear. Most specific-purpose transfers (DAK) is being used for replanting, not specific for forest conservation. If the current conditions continue to exist, I guess, first and foremost, deforestation will happen again and again and at an alarming rate. Furthermore, forests will provide little additional economic and ecological benefits for the communities dependent on forest, both inside and around forests, let alone helping contribute to economic growth. In the 1970s, 1980s, forestry sector was a prima donna, alongside oil and gas sector, and represented one of the largest tax and non-tax revenue sources. It has changed now.

I would suggest that the national parliament (DPR RI), Ministry of Finance, Ministry of Forestry and the Environment, and experts from universities, those who share concern about forest conservation and climate change, lead the way in managing forests. We should learn from, and to some degree, replicate what successful in forest conservation concept is that is applied in other forest-rich countries. The purpose of this is to reap economic and ecological benefits, both aiming at improving well-being and economic welfare of Indonesia.

About the exchange and trip to India, I am surprised and very thrilled. I gained new knowledge, new perspective on how to integrate fiscal perspective and bureaucratic structure into the concept and policy of forest conservation, in a synergized way.



### VIVA YOGA MAULADI

Member of National Parliament of the Republic of Indonesia, Commission IV on Agriculture, Food, Maritime, and Forestry (Komisi IV, DPR RI)

## ABANG MUHAMMAD NASIR

Head (Bupati) of Kapuas Hulu District, West Kalimantan.

I am especially honored to be invited by the University of Indonesia to visit India because only three out of hundred other districts in Indonesia were invited for the exchange and visit. Kapuas Hulu has been struggling as a forested district and conservation district to get special funding from the state budget allocated for forest conservation.

We went to Dehradun on the 5th of September 2017 and had meetings with forest survey and forest research organizations there. I saw so many things there that are especially useful for Kapuas Hulu, my district, where 51.5 per cent of its area are forest. I saw a strong commitment from the Government of India. By “exceptional” I mean that the government has been able to calculate [the transfer to states] and could establish a Finance Commission for the interest of many. From the trip, I saw a difference between the Indonesian and Indian Government particularly in terms of their commitment for conservation area. In Indonesia, communities living in forest or conservation areas cannot make ends meet, or worse, they are left behind.

On the one hand, given the status of conservation district, such as that of Kapuas Hulu, options for development are limited. For instance, certain forest area cannot be utilized by the people. Gold mining, fisheries, and home construction materials such as forest timber are also underutilized. Infrastructure development is also scarce. Without basic infrastructure, communities are left underdeveloped. On the other hand, communities and people are willing and committed to protect and preserve forests. But they do not seem to see any clear additional benefits from doing so.

It is my hope that all stakeholders, experts, and ministries, will create solutions for this issue. I hope personally that we will have innovations for all forest-rich districts across Indonesia. Additional financing from the central government dedicated to the conservation districts will create benefits for them. And so, if conservation districts receive transfers allocated based on their forest cover, I believe, the central government will no longer need to do socialization to those districts to increase their awareness to preserve their forests.

The trip to India was wonderful. First, as I mentioned, only three districts were invited for this occasion and it was an honor to Kapuas Hulu to be one of them. Second, this is an initial step and a sign of goodwill for conservation district like Kapuas Hulu. Please let us know of any results and follow-ups from the trip.



**ABANG MUHAMMAD NASIR**

Head (Bupati) of Kapuas Hulu District,  
West Kalimantan

## MUHARRAM PENE SUPU

Head (Bupati) of Berau District, East Kalimantan

This is what I understood from the fiscal transfers as they are applied in India based on forest cover preserved and maintained by each state. Transfers to states are measured by certain index and that index serves as an allocation mechanism that gives added value to the states. I think this is a positive attitude. It shows that a country is concerned with preserving their forests. With ways of managing forest like this, if this were implemented in Indonesia, we can expect that jurisdictions with a large area of forests will maintain their forests to stay in condition as good as possible. The central government here creates a policy that links between the additional value received by the districts and the transfers to districts from state budget (APBN).

I am aware that this is a national policy. The process to design the policy, and the system that underlies that policy, will certainly involve many stakeholders. The process of formulating policy in Indonesia is perhaps different from that of India. I think it is worth considering that the delegates of this exchange, along with partners like GIZ, can follow up on this and discuss about possibilities to rethink the existing transfer allocation system. In my view, right now, if we take the general-purpose transfers (DAU) as an example, it is distributed based on number of population, area cover, and economic potential of district. We may want to add one more indicator, and that is forest potential.

If this kind of indicator is introduced into our fiscal transfer system, I believe, districts with large forest areas would be keen to protect their forests. An example here is my district, Berau. With a total area around 3.4 million ha and about 74 per cent of which belong to virgin forests, I think the opportunity is there, and this should be possible, to get additional revenues through transfer system similar with that in India (that is, forest cover as an indicator to allocate transfers). In the presence of such transfers, head of districts will have to rethink, really hard, to decide on whether to accept any proposals from both domestic and foreign investors to turn their forests, say, into plantations.

Another lesson we can take from India is what we experienced in Dehradun. We saw firsthand there one of the world's largest, state of the art forest research facilities, the Forest Research Institute (FRI). It houses almost all kind of timber in the world in their collection and has continued to do research since 1961. Indonesia's forests are in fact as complex as that of India. Indonesia needs to have an independent forest research institute, one whose focus shall be, among others, on financial mechanism that will help forest-rich jurisdictions maintain their forest at highest quality (...).

I should extend my highest appreciation for the organizers of the trip. Despite tight schedule and high mobility, the organizers were quite extraordinary in preparing what was needed. Lodging, services, and so on, was almost without problem. I hope this kind of event can continue in the future.



**MUHARRAM PENE SUPU**

Head (Bupati) of Berau District, East Kalimantan

## PAULINA

Deputy Head (Wakil Bupati) of Sigi District, Central Sulawesi

In my view, fiscal transfer scheme in India is just extraordinary. The Government of India seeks to encourage the states to maintain their forests through fiscal scheme. Sigi District, where I come from, has 74 per cent of its land is forest. We have no sea. We are protecting forests. But it seems that there is no monetary value from conserving forests especially seen from local government. Human population is growing but land for settlements is limited by forest areas. There is a growing impression that we, as forest protectors, are getting no added value from protecting forests. There are some efforts carried out now at the local level. We are reviewing reforestation programs. We have the program of Green Sigi. Most of our territorial area is forested areas and in some selected areas we plant trees. We also plant productive trees that provide added benefits for local communities.

India is exceptional. Its central government pay considerable attention to the states, especially forest-rich states that keep and preserve their forests. The proof is the efforts that the government took following the recommendations of the 14th Finance Commission. District like Sigi in Indonesia wants this kind of fiscal transfer policy. We protect the forest and we get compensation for that. Do not give compensation only for districts that protect the sea, as it is now with our DAU transfers, because it will not be fair to those districts without sea in their territory as the case in Sigi.

The trip to India was successfully organized. It was also fun. Participants obtained knowledge and I listened to the discussions. Now we will wait for the direction and policies from the central government. I hope that this is a fruitful trip and we could follow suit as successful as in India.



**PAULINA**

Deputy Head (Wakil Bupati) of Sigi District,  
Central Sulawesi

## PURWIYANTO

Expert Staff to the Minister of Finance on State Spending, Ministry of Finance

Starting from visiting the Forest Research Institute and its museums, and then visiting the National Institute for Public Finance and Policy, I could see an important point from our visit to India, that is a paradigm. What is paradigm? It is a mindset, a common understanding and agreement in India, among its citizens and policy makers, that forest is of paramount importance. They think that forest is a very important component of global life, therefore it must be protected and preserved. They established a set of actions to make forest both sustainable and beneficial.

They set forest cover as an indicator in allocating transfers from the central government to the states. The more a state preserves its forest, the more money it will get. As I learn their fiscal allocation formula, apart from the presence of forest cover, I see another component that is taken into consideration in determining the amount of fiscal transfers, and that is the goodwill from the states to participate and contribute to maintaining the balance of nature at the global level. They create such a fiscal formula so that people can benefit directly from forests. I believe the results are what we saw during the visit to the museums at FRI. Furthermore, perhaps there is another factor that ensures its success but is rarely mentioned. In their scripture it is said that, more or less, preserving the environment is very important. So much about paradigm.

In terms of turning many aspirations into real implementation, I see India is quite advanced. For us in Indonesia, we may need to set that paradigm. We need to have something like a forestry plan, like that of RUEN for energy sector, and put “a paradigm shift” into the plan as one of highest importance, that is, that approaching forest only as a source of state income (such as source of non-tax revenues) and as development capital (cleared down only for its timbers) and to be compensated by revenues from reforestation fund (Dana Reboisasi, DR) are now just something of the past. We do need to shift the paradigm to preservation and conservation. Only through such paradigm shift can forest provide benefits.

I cannot help but raise this question in India, what is the nature of the fund allocated for fiscal transfers? Is it in the form of incentive or compensation? Should it be a compensation, then the amount of transfer might not have to be larger than the opportunity cost of not utilizing forest. The government can just enforce a ban on cutting down and exploiting forests. Should the fund be incentive, I personally think the amount of transfer should be as much as or larger than the opportunity costs to be able to influence and change behavior. In my opinion, the Indian fiscal transfer is a form of compensation. The government enforces a law, the people obey it, and they get certain amount of transfers. Whether the Government of India gives compensation an amount of as much as, or larger than, the opportunity cost is a different discussion.

Our general-purpose transfers (DAU) formula must be evaluated. We need to see whether it needs a revision or improvement. The evaluation should be based on our own paradigm, however. I see that our reforestation fund (DR) is an incentive to cut down forests. I believe that our paradigm is different with that of India. Another important concern is about the commitment of our institutions and policy makers. In the near future all relevant stakeholders need to meet and begin to formulate what Indonesia’s new paradigm towards environment and forest is. This new paradigm needs to be proposed and communicated to the President. I believe things would be easier if it is coming directly from the President.

I have never been in a trip like this before. This trip has opened my eyes. A country that looks like a less advanced nation to me, it turns out, has a very high awareness about forest sustainability. And India has started this since the 1930s. It was surprising to me, and I therefore really appreciate this trip. Indonesia should start getting as serious as India in protecting its forests. I was also amazed by the people I saw at the FRI. These are highly educated, highly passionate people. I guess we could hardly find people like them in Indonesia. Just try to find PhD graduates who are willing to work at, and maintain, a museum on daily basis.



### PURWIYANTO

Expert Staff to the Minister of Finance  
on State Spending, Ministry of Finance

## KUNTA WIBAWA DASA NUGRAHA

Director of Budget Formulation, Directorate General of Budget; Ministry of Finance

What we gathered from this trip is India implements a green federalism system. This is very good. The system can transform people's mindset from forest as source of income to forest as something to be preserved, and the governments must give a compensation for this preservation. However, the system has been only fully up and running for 3 years now so we need to see and evaluate later whether the change in fiscal transfer system has brought relatively more benefits to the society. But despite such reservation I personally think that the Indian fiscal transfer concept is exceptional.

If we are to implement this fiscal concept in Indonesia, first we need to see at the whole picture. Not only to look at DAU transfers, but also at the Village Fund and others, for instance. We already have reforestation fund (Dana Reboisasi, DR). The concept of DR, however, is related to revenues. The higher the revenues from forest timber, the higher the DR transfers that district or province will get. In that light, if we intend to similar concept that applied in India, then a transfer like DR should no longer be in place. The consequence is, we need to transform our DAU transfers such that part of DAU transfers is allocated to preserve and protect forests. Our mindset needs to be transformed, too. From one that views forest as revenue source into one that puts forest as part of sustainability. Sustainability from both fiscal side and environmental side. We need to discuss in detail what the status and concept of existing fiscal transfer instruments is, and what the desired changes in our fiscal transfer mechanism should be.

Our trip to India is satisfactory. We got the idea why we need to learn from this country. We went to Dehradun to see how we can calculate and value forest, learn how to protect forest so that forest can serve as the very foundation to sustain the environment and our life. Then we learn from the National Institute of Policy and Public Finance about concepts in India for long-term purposes such as green federalism, sustainability-related and policy-related concepts. We also discussed with think tank that helped develop the fiscal formula with forest indicator. I think participants of the trip have grasped the general idea of the concepts in India.

I think the Indonesian delegates in this exchange and trip to India has formed itself and represented related institutions. Upon return in Indonesia we can discuss what we learned from India as viewed from various aspects be it financial, environment, forestry, science, or regional readiness. We need to really change our mindset. We also need to be aware of our limited fiscal space given our many needs. We need safeguards for environment, fiscal, development, and our economy.



**KUNTA WIBAWA DASA NUGRAHA**

Director of Budget Formulation, Directorate General of Budget; Ministry of Finance

## SUYATNO SUKANDAR

Director of Conservation Area, Directorate General for Natural Resources and Ecosystem Conservation, Ministry of Environment and Forestry

The insights from the exchange to India, in both Dehradun and New Delhi, can feed into the discussions on financing regional governments through general-purpose transfers (DAU). Some districts have increasingly complained about the current condition they are facing, especially those whose areas are forested and serve conservation status. The head of Malinau District has requested me to be a member of the research commission being tasked to assess general-purpose transfers of the district. The district is home to the Kayan-Mentarang National Park.

I guess there are two alternatives to address the condition in districts like Malinau. The first alternative is about proposing a reform of the Law 32 on regional equalization fund. The mind set behind this is the idea that districts that exploit timber resources will receive less funds compared to districts that designate to keep their areas for conservation. The second alternative is to propose in the way general-fiscal transfers are being allocated to include an indicator of conservation area index.

The trip to India was very useful. I especially find that the composition of the delegates quite proportional. There were high ranking officials that represent the Ministries of Finance and Forestry and the Environment, researchers, and regional governments.



**SUYATNO SUKANDAR**

Director of Conservation Area, Directorate General  
for Natural Resources and Ecosystem Conservation,  
Ministry of Environment and Forestry







# PROFILE OF DELEGATES



### EVA KUSUMA SUNDARI, MA., MDE.

The House of Representatives of the Republic of Indonesia (DPR RI), Commission XI.

Ms. Eva Kusuma Sundari is a law maker at the House of Representatives of the Republic of Indonesia and member of its Commission XI which focuses on economics, finance, and banking. First elected in 2004, Ms. Sundari represents the Indonesian Democratic Party of Struggle (PDI-P). In addition to her work with ASEAN Parliamentarians for Human Rights (APHR), she is a member of the International Task Force of the Global Organization of Parliamentarians against Corruption. Prior to becoming a member of the parliament, Ms. Sundari was actively involved in the women's empowerment movements and NGOs. She obtained her master degrees on politics of alternative development strategy, from the Institute of Social Studies, The Hague, in the Netherland, and on development economics at the University of Nottingham, UK.



### VIVA YOGA MAULADI, M.SI.

The House of Representatives of the Republic of Indonesia (DPR RI), Commission IV.

Mr. Viva Yoga Mauladi a law maker and member of the Commission IV at the National Parliament of the Republic of Indonesia, overseeing affairs on agriculture, plantation, forestry, fisheries, and food. He currently serves as Vice Chairman of the National Mandate Party (PAN) Faction at the House, 2014-2019. In his prior assignments, Mr. Mauladi served as the Chairman of the Planning and Election Monitoring Department of National Mandate Party (PAN), 2000 to 2005, and Deputy Secretary General for the Agency of Membership and Organization Development, 2005-2010. Mr. Mauladi has also served as the chairman of his party electoral campaign team during the 2014 presidential and parliamentary election. With a veterinary medicine background by training, he completed his master degree on political policies from University of Indonesia.

**PAULINA, S.E., M.SI.**

Deputy Head of Sigi District in Central Sulawesi

Ms. Paulina is the Deputy Head of Sigi District in the Province of Central Sulawesi for the period of 2016-2021. Prior to this service, she was the Deputy Head of Regional House of Representatives (DPRD) of Sigi District for two consecutive periods from 2009 to 2016. She is the chair of Gerindra Party in the district. Her previous roles included serving as the Deputy Head of the National Youth Committee of Indonesia (KNPI). Mrs. Paulina was born in Palu in 1970. She earned her bachelor degree majoring in Economics and a master degree in Public Administration from Universitas Tadulako, Palu, Indonesia.

**ABANG MUHAMMAD NASIR, S.H.**

Head of Kapuas Hulu District in West Kalimantan.

Mr. Abang Muhammad Nasir is the current Head of Kapuas Hulu District in the Province of West Kalimantan. He has served as the Member of District House of Representatives (DPRD) of Kapuas Hulu District for two consecutive periods from 2004 to 2010. He was the Chair of the United Development Party (PPP) in his district from 2004 to 2010. Mr. Nasir has been a member of the cultural council of Majelis Adat Budaya Melayu (MABM) of Kapuas Hulu District, for which he served as the chair for two periods. Born in Nanga Bunut, in Kapuas Hulu, in 1961, Mr. Nasir earned his bachelor degree on Law from Universitas Panca Bhakti in Pontianak, West Kalimantan.



**MUHARRAM PENNE SUPU, S.P.D., M.M.**

Head of Berau District in East Kalimantan

Mr. Muharram Penne Supu is the current Head of Berau District in the Province of East Kalimantan for the period of 2016 to 2021. Before joining politics and government, he was a teacher for mathematics and accounting subjects, and then headmaster, Senior High School (SMA) 1 Tanjung Redeb and SMA Muhammadiyah Tanjung Redeb, both in Berau District. He was also a lecturer in mathematical economics and accounting at Muhammadiyah Institute of Economic Science from 1991 to 1998. Beginning to engage in political activities in 1997, he later served as member and Deputy Head of District House of Representatives (DPRD) of Berau District representing the Prosperous Justice Party (PKS). Born in Berau in 1968, Mr. Supu earned his bachelor degree in Mathematics from Universitas Terbuka and master degree in Financial Management from Universitas Mulawarman in Samarinda, East Kalimantan.



**DR. KINDY RINALDY SYAHRIR**

Deputy Director at the Center for Climate Change Financing and Multilateral Policy, Fiscal Policy Office, Ministry of Finance

Mr. Kindy Rinaldy Syahrir is the Deputy Director of International Cooperation and Climate Change Financing at the Ministry of Finance's Fiscal Policy Office. His portfolio centers around climate and development finance with previous assignments included serving as Deputy Director for Macroeconomic Surveillance and Head of Revenue Policy from State-Owned Enterprise. Dr. Syahrir also possessed extensive private sector experiences with PT Aneka Tambang as a member of the company's Risk Management Committee, and its Lead Economic and Business Advisor, and with PT Telkom Indonesia and PT Mattel Indonesia as Lead Financial Analyst. Dr. Syahrir holds bachelor degrees in Physics from Bandung Institute of Technology and in Manufacturing Engineering from the University of New South Wales, and a master degree in Accounting, Finance, and Economics from the University of Sydney. He earned his PhD in Economics from Universitas Padjajaran, Bandung, Indonesia.

**KUNTA WIBAWA DASA NUGRAHA, PHD.**

Director of Budget Formulation, Directorate General of Budget, Ministry of Finance

Dr. Kunta Wibawa Dasa Nugraha is the Director of Budget Formulation at the Directorate General of Budget, Ministry of Finance. Since March 2014 he has assumed this assignment and has been tasked with formulating and implementing technical policies and standardization in the areas of the State Budget and Expenditure (APBN) formulation. Dr. Nugraha earned his bachelor degree majoring in Development Economics from Universitas Gadjah Mada and his Master of Arts (MA) degree in Economics from University of Boston. He earned his Doctor of Philosophy in Economics from University of Canberra in 2013. He was born in Jakarta in November 1968.

**PURWIYANTO, S.E., M.A.**

Expert Staff to the Minister of Finance on State Spending, Ministry of Finance.

Mr. Purwiyanto serves as an Expert Staff to the Minister of Finance on state spending matters since November 2013. He started his career at the Ministry of Finance since 1998 and has then served this institution as a research assistant in the Financial and Monetary Analysis Agency (1999) and Agency for Economic, Financial, and International Cooperation Studies (2005). From 2006 to 2011 he became the Head of Sub-directorate at the Directorate General of Budget, and subsequently he was appointed as the Reviewer of Non-tax Revenue, before being inaugurated as the Director of State Budget Preparation. Born in Temanggung, in Central Java, in May 1963, Mr. Purwiyanto earned his bachelor degree majoring in Development Economics from Universitas Diponegoro and a Master of Arts from the University of Colorado.



**MAMAN KUSNANDAR, M.M.**

Head of Finance Bureau under the Secretary General, Ministry of Environment and Forestry

Mr. Maman Kusnandar is the Head of Finance Bureau under the Secretary General at the Ministry of Environment and Forestry since 2012. His prior assignments included serving as Head of State Revenue Division and the Head of Investment and Budget Implementation Division both in the Finance Bureau under the Secretary General at the Ministry of Environment and Forestry. He was awarded the Honorary Signs from the Republic of Indonesia (Satyalencana Karya Satya 20 Tahun) in 2009 for his two decades of satisfactory service to the country. Born in Kuningan, Indonesia, in 1962, Mr. Kusnandar earned his bachelor degree in Management from Universitas Krisnadwipayana and his Master of Management degree from Universitas Satyagama in Jakarta.



**IR. SUYATNO SUKANDAR, MSc.**

Director of Conservation Area, Directorate General for Natural Resources and Ecosystem Conservation, Ministry of Environment and Forestry

Mr. Suyatno Sukandar is the Director of Conservation Area, Directorate General for Natural Resources and Ecosystem Conservation at the Ministry of Environment and Forestry. He assumed this assignment since 2016. His prior assignments included serving as a chairman of high profile conservation centers and offices of national park across Indonesia such as the Center for Natural Resources Conservation (BBKSDA) of West Papua (2013) and East Java (2016) and Gede Pangrango National Park (2016) and Kerinci Seblat National Park (2017). Born in Cirebon, Indonesia, in 1958, Mr. Sukandar earned his bachelor degree majoring in Forest Product Technology from Bogor Agricultural Institute (IPB) in 1986. He obtained his Master of Science degree from the University of Mississippi in 1994.



### ERIK AMUNDITO, PHD.

Senior Planner at the Deputy of Maritime and Natural Resources, Ministry of National Development Planning/National Development Planning Agency (BAPPENAS)

Dr. Erik Amundito is a senior planner at the Directorate of Environmental Affairs, Deputy of Maritime and Natural Resources, Ministry of National Development Planning/National Development Planning Agency (BAPPENAS). He has been involved at the agency in several roles related to formulating policy and strategy of national development plan, including monitoring and evaluating the implementation development programs in terms of their environmental dimensions, and preparing annual budget allocation and planning. He holds a master degree in Environmental Engineering from Bandung Institute of Technology. He obtained his PhD in Development Policy from the University of Hiroshima, Japan.



### PROF. JATNA SUPRIATNA, PHD.

Head of the Research Center for Climate Change at the University of Indonesia (RCCC UI) and Board of Trustee of the University of Indonesia

Prof. Jatna Supriatna is an eminent biologist. He is the head of University of Indonesia's Research Center for Climate Change, and the Director of Biodiversity and Conservation Studies and Coordinator of Graduate Program on Conservation Biology at Biology Department of the University of Indonesia. He serves as an editor for several international journals such as the Tropical Biodiversity and Asia Primate Journal. He has been board member of several international organizations, notably the Bornean Orangutan Survival Foundation, member of IUCN-World Conservation of Protected Area, and was president-elect of South East Asia Primatologist Association and the Chairman of IUCN-SSC PSG South East Asia. He has held public assignments by the Government of Indonesia which included becoming the member of National Research Council (1999-2004), member of Steering and Committee on Biodiversity Action Plan at the Ministry of National Development Planning, and delegate member of the Republic of Indonesia to the CBD, IUCN, World Park Congress, UNFCCC, and UN Forest Forum, among others. Prof. Supriatna earned his PhD from the University of New Mexico and a post-doctoral study at Columbia University, both in the USA.



### NURUL LAKSMI WINARNI, PHD.

Conservation Biologist at the Research Center for Climate Change,  
University of Indonesia (RCCC UI)

Dr. Nurul Winarni is a Research Scientist at the Research Center for Climate Change, University of Indonesia (RCCC UI), in area of conservation biology. Prior to joining RCCC UI, she worked as a field biologist for years in various research projects on birds, primates and butterflies in Lampung and Southeast Sulawesi. Her research interest mainly focused on biodiversity monitoring, bird population dynamics, community ecology on birds and butterflies particularly on the effect of anthropogenic disturbance to bird and butterfly community, as well as evaluating the use of birds and butterflies as species indicator of disturbance. In relation to climate change, she has been studying the impact of climate change to phenological patterns of tropical rainforest trees and the response of biodiversity to climate change. Dr. Winarni is a member of Pheasant Specialist Group (PSG) and Partridge, Quail, and Francolin Specialist Group (PQFSG) of the IUCN Species Survival Commission. She graduated from Biology Department of University of Indonesia and obtained a master degree from Warnell School of Forest Resources, University of Georgia. She earned her PhD from Manchester Metropolitan University, UK.



### GEORG BUCHHOLZ

Program Director, Forests and Climate Change Programme (FORCLIME), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Mr. Georg Buchholz is the Program Director of the Forests and Climate Change Programme (FORCLIME), a Technical Cooperation Module of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) under the cooperation between the Government of Indonesia and the Government of Federal Republic of Germany. Mr. Buchholz has been working as technical advisor in forestry for GIZ in Asia for 20 years. He had been assigned to different posts in Indonesian, Malaysia, and Laos providing support in the areas of fire management, GIS and remote sensing, biodiversity conservation, sustainable forest management, forestry planning, and climate change in the forestry sector. He has regional experience at ASEAN level and has participated in different regional and international fora, including the UNFF and UNFCCC. In Indonesia he has been supporting the REDD+ readiness process since the COP in Bali 2007 and was involved in the development of forest management units and the forest governance reform process since 2003. From 2009-2014 he managed the GIZ forestry, biodiversity and climate change portfolio in Laos and returned to Indonesia in 2015. As a Program Director, he is currently provides support and expertise to policy development on forest and climate change at national and sub-national levels. He graduated from the Faculty of Forestry in Freiburg in Germany in 1996, while having had a scholarship at the University of Toronto, Canada where he wrote his master thesis on forest fire prevention. He is an active member of the German Foresters Association.



### IR. WANDOJO SISWANTO, MSC.

Senior Advisor, Forests and Climate Change Programme (FORCLIME), Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)

Mr. Wandojo Siswanto is a Senior Advisor at the Forests and Climate Change Programme (FORCLIME), a Technical Cooperation Module of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) under the cooperation between the Government of Indonesia and the Government of Federal Republic of Germany. He is responsible for the National and Sub-national Policy Framework, advising on forest management unit development, climate change and REDD+ development, and forest fire prevention policies. Mr. Siswanto worked as government official of the Ministry of Forestry (now the Ministry of Environment and Forestry) for more than 27 years. He was also a negotiator and participant at different international fora. He helped develop and implement a number of multi-lateral programs such as the Integrated Conservation and Development Program (ICDP), the Integrated Protected Areas System (IPAS), the Natural Resources Conservation Program (NRM-P), and the East Asia and Pacific – Forest Law and Governance (EAP-FLEG). In the early 2000 he promoted the development of forest management unit through a program that called for strengthening the implementation of sustainable forest management through the establishment of forest management unit or “SFM through FMU”. Mr. Siswanto graduated in Forestry at Bogor Agricultural University, and completed his master degree from the Department of Forestry and Natural Resources, Purdue University, West Lafayette, Indiana, USA.



### DR.RER.POL. SONNY MUMBUNAN

Economist at the Research Center for Climate Change of University of Indonesia (RCCC UI), Lead of the Indonesia-India Expert Exchange on Fiscal Transfer Mechanism for Forest Conservation

Dr. Sonny Mumbunan is an economist at the Research Centre for Climate Change of the University of Indonesia (RCCC UI) and teaching Environmental Economics at Biology Master Program at University of Indonesia. He is also a senior economist at the World Resources Institute (WRI) Indonesia for new climate economy and new food and land use economy programs for Indonesia. He designed and led the Indonesia-India High-Level Expert Exchange on Fiscal Transfer Mechanism for Forest Conservation. His policy research interest ranges from climate change economics and public finance to data governance, and covers thematic areas of extractive industries, industrial pollution, nature conservation, and ecosystem services. In his public assignments, he has served as policy advisor at the President’s Unit for Development Monitoring and Oversight (UKP4) and the Executive Office of the President (KSP) of the Republic of Indonesia. In this capacity he was a negotiator for Indonesia for the United Nations Sustainable Development Goals (SDGs) and the lead author of the Blueprint for Indonesia’s One Data Initiative (Satu Data). He wrote a dissertation at the Economics Department of the Helmholtz Centre for Environmental Research (UFZ) and earned his PhD in Economics (Dr.rer.pol.) from Universitaet Leipzig, Germany. Dr. Mumbunan is an active member of the International Society for Ecological Economics (ISEE) and Indonesian Academy of Young Scientists (ALMI)







Forests and the externalities arising from them impact both the revenue capacities and the expenditure needs of the States.

(...) there is a need to address the concerns of people living in forest areas and ensure a desirable level of services for them. At the same time, it is necessary to compensate the decline in the revenues due to existing policy prescriptions.



*Paragraph 2.33, page 18. The 14th Finance Commission Report.*



Forests, a global public good, should not be seen as a handicap but as a national resource to be preserved and expanded to full potential, including afforestation in degraded forests or forests with low density cover. Maintaining a green cover, and adding to it, would also enable [India] to meet its international obligations on environment related measures



*Paragraph 2.33, page 18. The 14th Finance Commission Report.*

The Indonesia – India High Level Expert Exchange is organized by:



**Contact:**

Dr. rer. pol. Sonny Mumbunan

[sonny.mumbunan@ui.ac.id](mailto:sonny.mumbunan@ui.ac.id)



