



विज्ञान एवं प्रौद्योगिकी विभाग  
DEPARTMENT OF  
**SCIENCE & TECHNOLOGY**



राष्ट्रीय नवप्रवर्तन प्रतिष्ठान – भारत  
National Innovation Foundation - India



*a report on*

**ASEAN India Grassroots Innovation Seminar (Keynote Address & Panel Discussions)  
Grassroots Innovation Competition and Student Innovation Competition  
An Exhibition of Innovations**

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**27<sup>th</sup> - 30<sup>th</sup> September, 2018  
Indonesia**

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## Executive Summary

ASEAN - India relations witnessed an important and unprecedented milestone this year when India's 69<sup>th</sup> Republic Day celebrations was marked by the presence of leaders from all ten members of the Association of Southeast Asian Nations (ASEAN). It was preceded by the Delhi Declaration, which (among other things) agreed upon continued efforts towards deepening sectoral relations in science and technology (S&T) through cooperation on the ASEAN-India Innovation Platform, ASEAN-India Research & Training Fellowship Scheme, and ASEAN-India Collaborative Research and Development Programme, in areas aligned with ASEAN Plan of Action on Science, Technology and Innovation (APASTI) 2016-2025, including, among others, nano-technology, materials science and biotechnology; and enhance capacity building on S&T.<sup>1</sup> As a step in this direction to further consolidate S&T cooperation, ASEAN India Grassroots Forum was organized as a part of the Puspipitek Innovation Festival (PIF) - 2018 in Jakarta, Indonesia at the Center for Research Science and Technology, Indonesian National Science & Technology Park (PUSPIPTEK) Ministry of Research, Technology, and Higher Education between 27<sup>th</sup> and 30<sup>th</sup> September, 2018.



A delegate from ASEAN Member State at the ASEAN India Grassroots Innovation Forum 2018  
(Source: Instagram)

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<sup>1</sup> <http://pib.nic.in/newsite/PrintRelease.aspx?relid=175908>

The forum comprised of a Seminar on Grassroots Innovation including Keynote Address sessions and Panel discussions, a Grassroots Innovation Competition and a Student Innovation Competition, an Exhibition of Innovations with participation from India and majority of the ASEAN Member States - Cambodia, Laos, Malaysia, Myanmar, Philippines, Vietnam and Indonesia. Following were the key objectives –

- Encourage innovation among grassroots communities
- Strengthen the regulations to create ecosystem for grassroots innovation
- Sharing experience and best practices in grassroots innovation among ASEAN communities and India
- Promotes and socializes of grassroots innovation products to governments, academics, business actors and the wider community



Delegates from India and ASEAN Member States on opening day of ASEAN India Grassroots Innovation Forum

During the four-day event, a series of activities were driven by National Innovation India – India (NII) and Department of Science and Technology (DST), Government of India and all of them in some way or the other deepened the Science, Technology and Innovation relationship between India and ASEAN Member States. The curiosity to know more about each other's innovations during competition, the thoughts that stemmed from either the speakers from either nation or audience from another nation during seminar (keynote address and panel discussions) and the profound inquisitiveness demonstrated by visitors at the Innovation exhibition was a major highlight, which would constantly remind us about the strong and meaningful ASEAN - India Dialogue Relations under the theme of "Shared Values, Common Destiny".

Amongst the citizens from ASEAN Member States, there were 11 Grassroots Innovators and 28 Student Innovators who are the biggest beneficiary of the forum. Not only it gave them an opportunity to benchmark their innovation by virtue of competition, but also they had an opportunity to



experience some sort of mentorship by virtue of participating in seminar which comprised of couple of keynote addresses and panel discussions with participation from India, Cambodia, Indonesia, Laos, Philippines and Vietnam.



Competition Award winners along with their trophies during ASEAN India Grassroots Innovation Forum

The opening day of four day PIF 2018 witnessed representation from Ministry of Research, Technology, and Higher Education the Republic of Indonesia, United Nations ESCAP, Office of the Mayor of South Tangerang, Philippines Board of Investments, Rumah Kreatif BUMN, Generation Social (a startup), Bina Swadaya, Philippines Social Enterprise Network, Malaysia Innovation Agency in addition to India and ASEAN Member States.

A valedictory function was organized on 30<sup>th</sup> September, 2018 to mark the end of four day PIF 2018 which primarily included a prize distribution ceremony. The Vice Mayor of Tangerang Selatan was present on this occasion and gave away prize to winners along with Dr Sri Setiawati, Head – Puspiptek.



Children from ASEAN Member States attended Puspiptek Innovation Festival (PIF) – 2018, of which ASEAN India Grassroots Forum was an integral part (Source: Instagram)



## Opening Session of the Puspiptek Innovation Festival (PIF) – 2018

The opening session of the Puspiptek Innovation Festival (PIF) – 2018 preceded the ASEAN India Grassroots Innovation Forum and UN ESCAP Forum.

During the opening remarks, Mr. Ainun Naim, Secretary General of Ministry of Research, Technology, and Higher Education the Republic of Indonesia shared his optimism that all parties would contribute to the economic growth, especially through the invention of entrepreneurship - based technology, human resources improvement and national industry competitiveness improvement.



Mr. Ainun Naim, Secretary General of Ministry of Research, Technology, and Higher Education the Republic of Indonesia delivering opening remarks during Puspiptek Innovation Festival (PIF) – 2018

Dr Sri Setiawati, Head – Puspiptek observed “In line with the theme, Innovation for All, PIF 2018 is aimed at convincing the society that innovation could be a solution for problems. Using innovation, people could at least become more adaptive to changes, especially in this dynamic era like now. The changes are absolutely in a good way”.

South Tangerang Mayor Ms Airin Rachmi Diany observed “innovating is a must and we must create innovation.” She shared her optimism that innovation could benefit her citizens in improving state’s competitiveness.

In her remarks, Ms Marta Perez Cuso, Economic Affairs Officer, Trade, Investment and Innovation Division – United Nations ESCAP, said the PIF was a chance for government officials, business players, researchers and innovators to network.



## Grassroots Innovation Seminar

### Keynote Address

The Grassroots Innovation seminar had an opening keynote speech by Prof Anil K Gupta, IIMA from India; followed by a keynote address by Mr Adamas Belva Syah Devara, Co-founder of Indonesia's Education Technology start-up "Ruangguru". The two keynote speakers presented diverse instances of innovation – Whereas Prof Gupta touched upon Grassroots Innovation and Children creativity driven innovations, Mr Adamas shared his experiences in providing services to support formal schooling system and widening access to high quality educational content to the furthest corners of the country through mobile / technology.

Prof Gupta touched upon Inclusive leadership, problems faced by rural women, key drivers behind frugality of innovations, emergence of social innovation. He emphasized upon simplicity, openness and a sharing culture. Instances of various grassroots innovators and Dr APJ Abdul Kalam IGNITE award winners were cited as to how their ideas and innovations have brought about some significant changes. Prof Gupta also cited compelling observations like there is an urgent need to introspect our download to upload ratio, and how it is most of the times inclined towards more download and less upload. Similarly, he referenced how pictorial communication through emoji's, Instagram is gaining momentum on the same lines as it used to be the case centuries ago.



Prof Anil K Gupta, IIMA, delivering his keynote address at the Puspiptek Innovation Festival (PIF) – 2018

Mr Adamas in his keynote address shared the experience of Ruangguru in transforming Indonesian education digitally. He touched upon how his start-up liaises with Local Government to roll out technology in classrooms and eventually serve 10 million students. He further emphasized how digital

makes people more demanding as fulfilment is known to be feasible, short attention span needs have to be addressed and open access, collaboration and public participation become pillars of the sharing economy.



Mr Belva Devara, Co-Founder and CEO, Ruangguru delivering his keynote address at Puspipstek Innovation Festival (PIF) – 2018

## PANEL DISCUSSIONS – ASEAN India Grassroots Innovation

The opening day witnessed a series of panel discussions with participation of the likes of -

- Mr Seng Veyanet (University of Heng Samrin Thbong Khmum (UHST), Cambodia)
- Ms. Tri Mumpuni (Founder, People Centered Business and Economic Institute (IBEKA), Indonesia)
- Mr. Sengchanh Pasayaseng (Deputy Director General of Technology and Innovation Department, Laos)
- Engr. Ramil T.Uy (DST, Phillipines)
- Dr Tran Anh Quan (Vietnam)
- Dr V Bhujanga Rao (ISRO Chair Professor at NIAS, India)
- Dr Vipin Kumar (Director, NIF, India) and
- Mr N P Rajive (Executive Director, Vibha Vani, India).

The topics of discussed were two fold –

(1) Grassroots Innovation Ecosystem (2) Best practices of Grassroots Innovation.

Panel Discussions were attended by more than 30 innovators from ASEAN Member States and India.



Dr V Bhujanga Rao, ISRO Chair Professor, NIAS at a Panel discussion on Best practices of Grassroots Innovation



Dr Vipin Kumar, Director, NIF at a Panel discussion on Best practices of Grassroots Innovation





Panellists from India and ASEAN Member States during the Seminar





Q&A session following the Panel discussion

On Grassroots Innovation Ecosystem and Best practices of Grassroots Innovation, the common theme that emerged was that there is so much that countries may learn from each other as opposed to re-inventing the wheel. The lessons shared by National Innovation Foundation – India on how the public institution has provided hand holding and end to end incubation support to grassroots innovators and creative children in the country for nearly two decades, and more importantly this movement lead to job creation, entrepreneurship and formal entities as early as 2002 when terms like start-ups was Greek. However, lately innovation driven enterprises positioned themselves as start-ups.

The biggest asset for the discussion was the diversity of the panel not only in terms of nationality but also the versatility of Institutions which were represented through their panellists.

#### PANEL DISCUSSIONS – UN ESCAP FORUM

In addition to Grassroots Innovation focused Seminar and Panel discussions, there was also organized a UN ESCAP forum focused on Inclusive Innovation Policies and Policies to enhance the social entrepreneurship ecosystem with representation from UN ESCAP, Department of Trade and Industry, Philippines; Malaysia Innovation Agency; and from few start-ups in Indonesia.

Assistant Secretary Felicitas Agoncillo-Reyes representing Philippines Board of Investments touched upon Inclusive Business and cited successful cases in her country like “Coffee for Peace”.

Sabri Rasyid representing Rumah Kreatif BUMN touched upon important issues like enhancing the quality of SME.

Ms Marina Kusumawardhani, Generation Social (a startup) talked about building enabling eco-system for Inclusive Business in Indonesia.

Dr. Ophirtus Sumule from Directorate General of Innovation Strengthening discussed the significance of Innovation Clusters for fostering grassroots innovations.

Mr Gomer Padong, Philippines Social Enterprise Network touched upon the vision to reach the farthest first.

Mr Bayu Krisnamurthi, Bina Swadaya shared his organizations 50 years' experience in enhancing social entrepreneurship eco-system.

Dr Melissa Foo representing Malaysia Innovation Agency touched upon Policy Innovations to maximize impact.

Finally, Mr David Soukhasing from ANGIN, talked about mobilizing domestic capital and shades of fundraising journey in Indonesia.



Ms Marta Perez Cuso, Economic Affairs Officer, Trade, Investment and Innovation Division – United Nations ESCAP (Source: Instagram)

## Grassroots Innovation Competition and the Student Innovation Competition

A major highlight of the forum was an Innovation Competition which had two categories – (1) Grassroots Innovation Competition, and (2) Student Innovation Competition, and India made its impact felt in both of them. Judges from Cambodia, India, Indonesia, Laos, Vietnam were experts in various fields and brought the right balance of diversity to overall process.

There were three prizes in each category and following cash prizes were to be given to winners

1. First Prize – USD 1500
2. Second Prize – USD 1000
3. Third Prize – USD 500



Glimpse of trophies which were to be won by participants from India and ASEAN Member States in competition

In the student's category, the total number of applications were 28: Cambodia (5), Indonesia (4), Laos (4<sup>2</sup>), Myanmar (5), Vietnam (5) and India (5). The first prize was won by Ms Zahwa Devarrah Widyatama from Indonesia for her innovation Landslide Sengon Detector, followed by Mr Dipankar Das from India as winner of second prize for his innovation Solar Thresher and Ms Sisomphone Phatthana and Mr Vatsalaphong Phongsavath from Laos jointly winning the third prize for their innovation Aquarium oxygen pump applied without electricity.

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<sup>2</sup> Includes a joint application by two students, accounted as single application in total count of 28.





Mr Dipankar Das presenting his innovation Solar Thresher during the Student Innovation Competition and assisted by Ms Annu Pandey from NIF – India in his pitch as an interpreter

In the Grassroots Innovation Competition, the total number of applications were 11: Indonesia (5), Laos (1) and India (5). This category was dominated by Indonesia with Mr Pausal Bahri winning the first prize for his innovation Artificial Leg from Cocos Fiber and Mrs Rina Widya Wati winning the third prize for her innovation Cooking oil saving frying tube with a fogging system. Mr Ishwar Singh Kundu from India won the second prize for his innovation Herbal Formulations for Agriculture.



(L) Mr Sanjay Tilwa presenting his innovation Groundnut Digger during the Grassroots Innovation Competition and assisted by Mr Tushar Garg from NIF – India in his pitch as an interpreter (R)





Ms Akanksha Guha presenting her idea “Height Adjustable Wash-basin” during Student Innovation Competition



Mr Subhash Ola presenting his innovation Condensation Heat Recovery Mechanism during the Grassroots Innovation Competition and assisted by Mr Tushar Garg from NIF – India in his pitch as an interpreter



Mr Kaushik Ranjan Boruah presenting his idea “Reeling of Cut and Pierced Cocoon of Muga Silkworm” during Student Innovation Competition



Ms Shweta Sharma presenting her idea “Bulb CFL remover and connector” during Student Innovation Competition





Ms Aparna Chandrasekar presenting her idea “Watch with pungent spray for bullies” during Student Innovation Competition

The results of the competition were announced on 30<sup>th</sup> September, 2018.



Mr Dipankar Das receiving second prize (\$ 1000) in Students Innovation Competition from Dr. Ir. Sri Setiawati



Mr Ishwar Singh receiving second prize (\$ 1000) in Grassroots Innovation Competition from Dr. Sri Setiawati  
Winners were felicitated during the valedictory function by Dr Sri Setiawati, Head – Puspiptek and Mr Benyamin Davnie, Vice Mayor of Tangerang Selatan.



All Award winners along with Mr R K Sharma – DST (India), Mr Benyamin Davnie, Vice Mayor of Tangerang Selatan and Dr Sri Setiawati, Head – Puspiptek





Ms Rina Widya Wati, a grassroots innovator from Indonesia won the 3<sup>rd</sup> prize in the Grassroots Innovator category at ASEAN India Grassroots Forum (Source: Instagram)



The Delegation from India along with the award winners and trophies won



Group photograph of all participants in the ASEAN India Grassroots Innovation Forum at Valedictory function



## The Innovation Exhibition

The exhibition had participation from India and ASEAN Member States with a significant participation from Indonesia. Visitors had lot of queries in relation to grassroots innovations from India and those which stem from children creativity, which help us gauge tremendous amount of interest being expressed.



The Innovation Exhibition during ASEAN India Grassroots Innovation Forum



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The Innovation Exhibition during ASEAN India Grassroots Innovation Forum



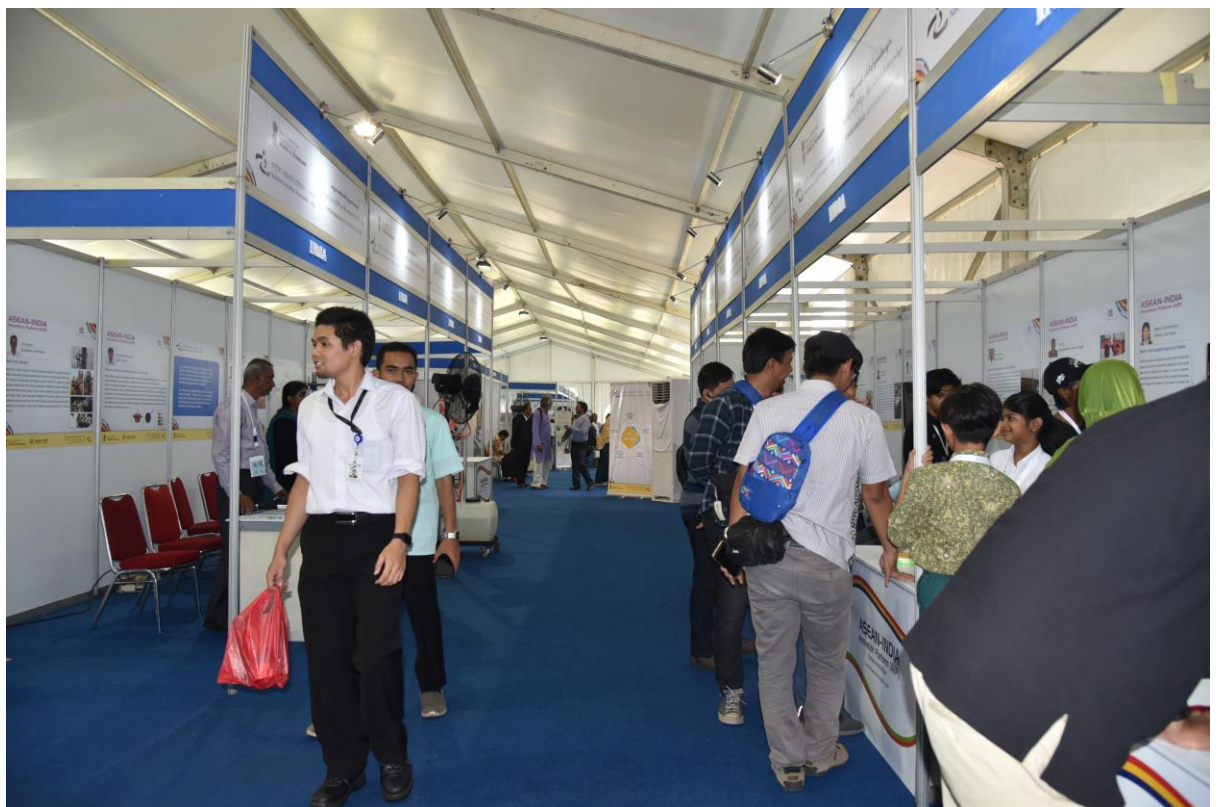
The Innovation Exhibition during ASEAN India Grassroots Innovation Forum (Source: Instagram)





The Innovation Exhibition during ASEAN India Grassroots Innovation Forum (Source: Instagram)





The Innovation Exhibition during ASEAN India Grassroots Innovation Forum



Mr Pausal Bahri who won the first prize for his innovation Artificial Leg from Cocos Fiber at the Innovation Exhibition during ASEAN India Grassroots Innovation Forum (Source: Instagram)





The Innovation Exhibition during ASEAN India Grassroots Innovation Forum (Source: Instagram)





Mr Ishwar Singh Kundu who won the 2<sup>nd</sup> prize at Grassroots Innovation Competition explaining about recent upgradations in his innovation during the Innovation Exhibition at ASEAN India Grassroots Innovation Forum



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