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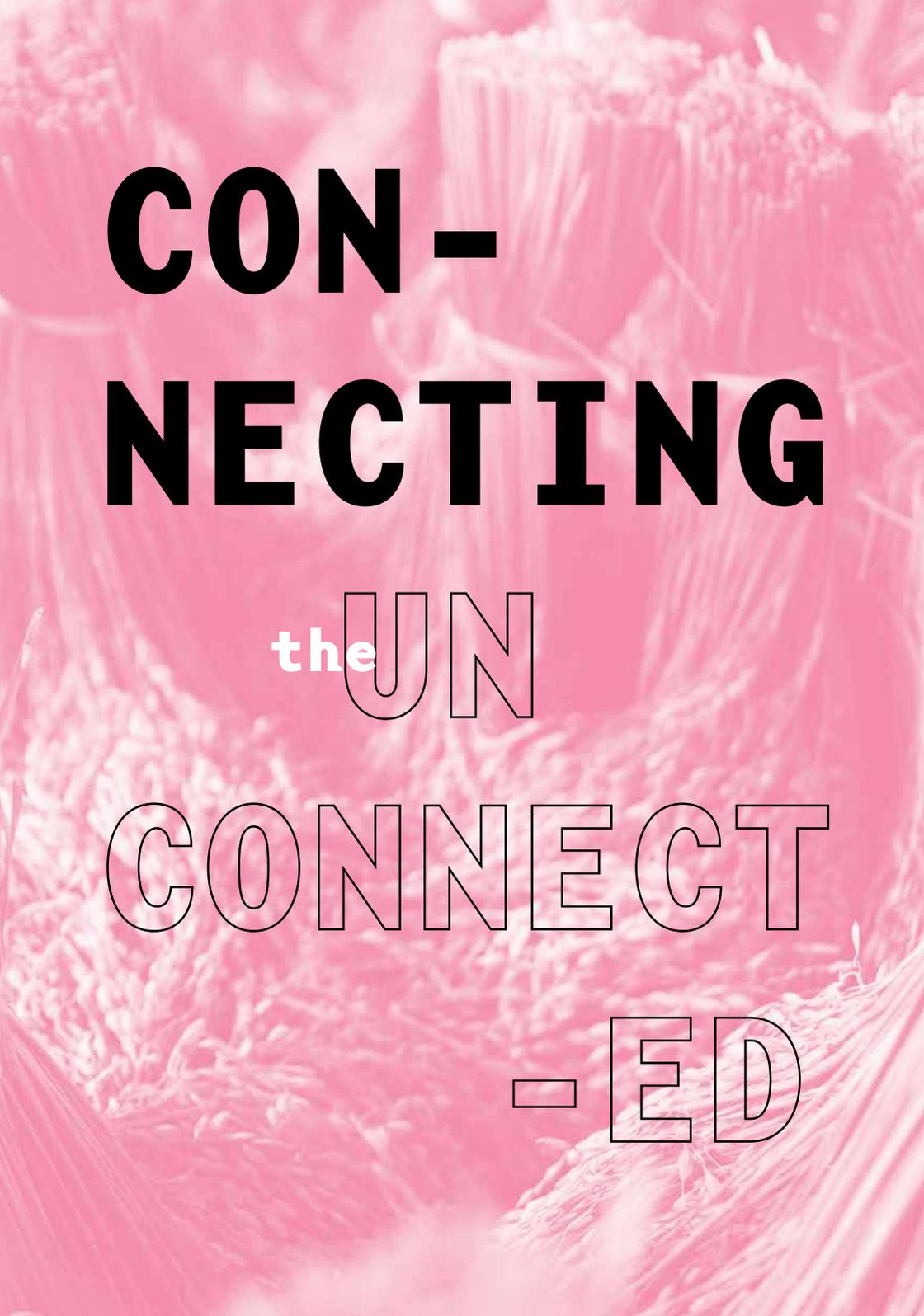
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**CONNECT  
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-ED

Connecting The Unconnected

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# CON- NECTING

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# FOREWORD: CONNECTING THE UNCONNECTED

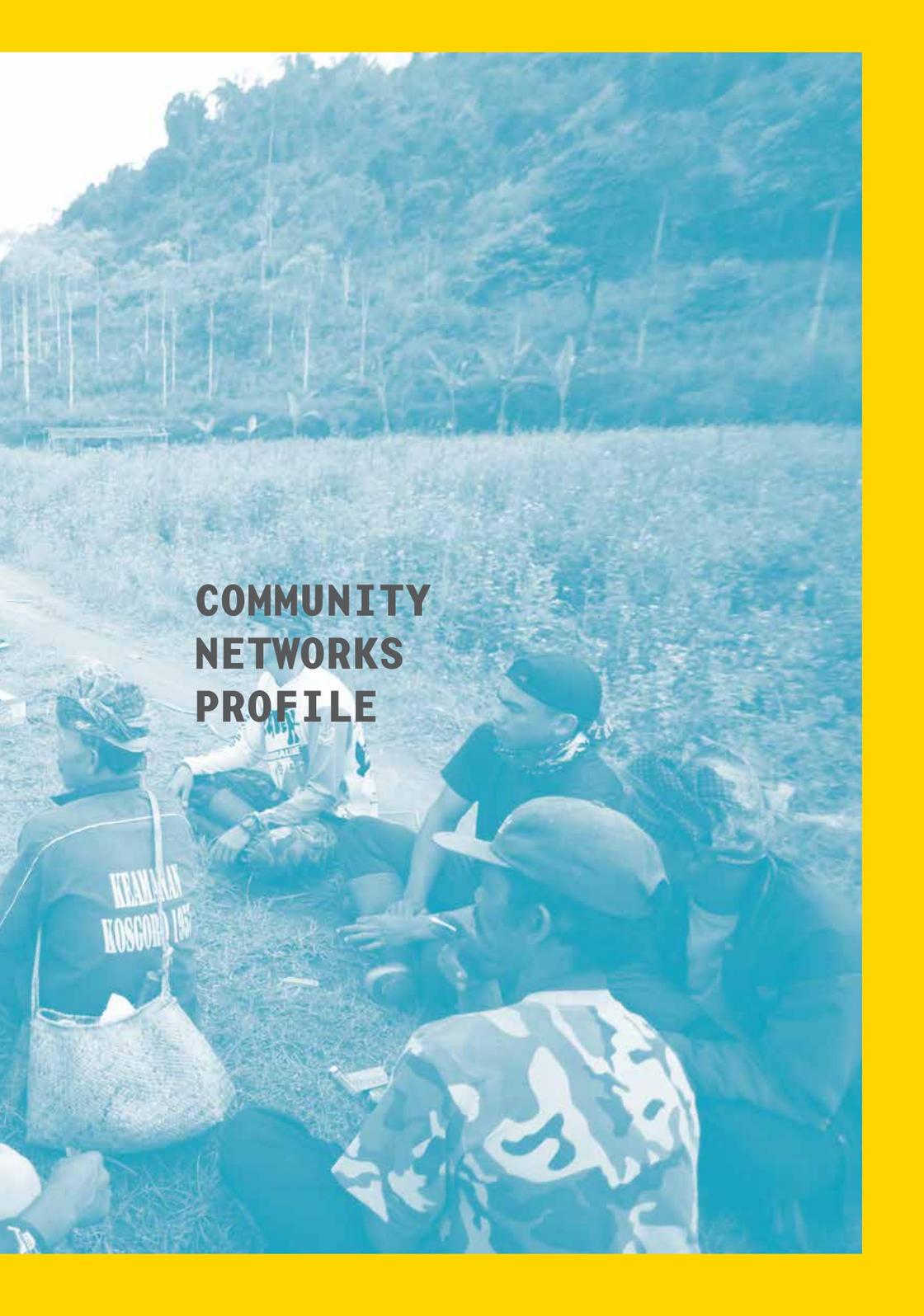
“Connecting the Unconnected: Supporting community networks and other community-based connectivity initiatives” is a project being implemented by APC in partnership with Rhizomatica that aims to directly support the development of community networks, with funds from the Swedish International Development Cooperation Agency (SIDA).

This project builds on APC’s existing local access-related work currently being implemented with Sida’s core support, and the knowledge gained from the Local Access Networks research project implemented by APC and Rhizomatica, with support from the International Development Research Centre (IDRC), during the period August 2017-January 2019.

The ultimate aim of the project is to contribute to an enabling ecosystem for the emergence and growth of community networks and other community-based connectivity initiatives in developing countries. It is part of a multi-year, multi-donor strategy envisaged to address the human capacity and sustainability challenges, along with the policy and regulatory obstacles that limit the growth of community-based internet connectivity initiatives.





A photograph of a group of people sitting on the ground in a field, possibly a rice paddy, with a dense forest of palm trees in the background. The image is overlaid with a semi-transparent blue filter. The text 'COMMUNITY NETWORKS PROFILE' is centered in the middle of the image.

# COMMUNITY NETWORKS PROFILE

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## COMMON ROOM

Yayasan Mitra Ruang Kolektif - also known as Common Room Networks Foundation (Common Room) - is an open platform for creativity and innovation, which was registered as a non-profit organization in 2006. This institution was started as a project led by Bandung Center for New Media Arts (active until 2006). After being initiated as a project that bridging dialogue and interaction to encourage multidisciplinary collaboration and connects numerous individuals, Common Room has been working to engage with diverse social and cultural backgrounds. Since the initial period of development, Common Room has been committed to maintaining space for freedom of expression and civic empowerment that utilized art, culture and ICT/media tools. Starting from 2013, Common Room also has been actively involved in a collaborative effort to develop urban and rural collaboration platform that nurtures creativity, innovation and social entrepreneurship both in local and international contexts.

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## APC (ASSOCIATION for PROGRESSIVE COMMUNICATIONS)

APC is an international network of civil society organisations founded in 1990 dedicated to empowering and supporting people working for peace, human rights, development and protection of the environment, through the strategic use of information and communication technologies (ICTs). We work to build a world in which all people have easy, equal and affordable access to the creative potential of ICTs to improve their lives and create more democratic and egalitarian societies.

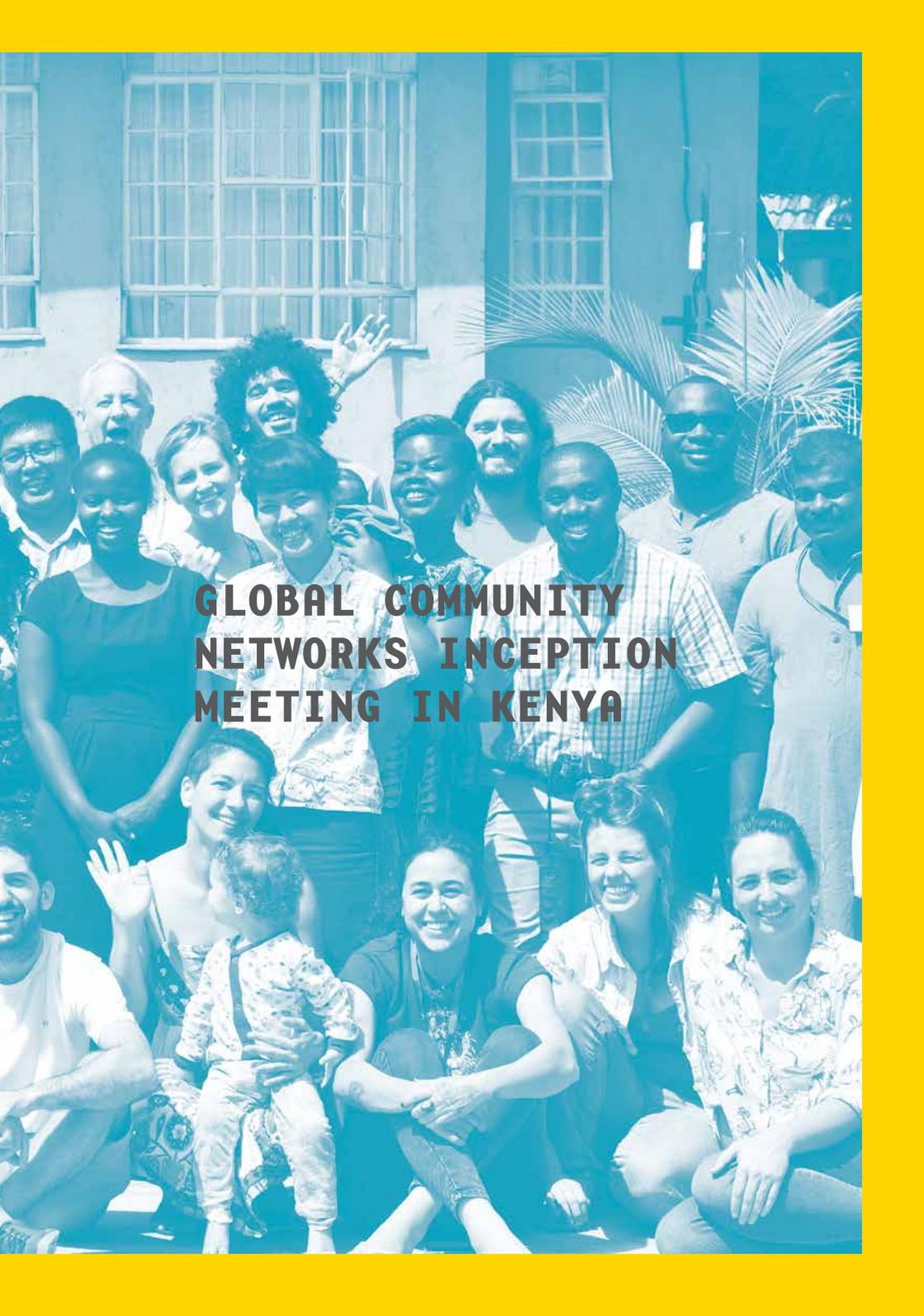
APC's strength lies in the fact that we don't get excited about the internet for the internet's sake. We are committed activists who want to use it to make the world a better place. We help people get access to the internet where there is none or it is unaffordable, we help grassroots groups use the technology to develop their communities and further their rights, and we work to make sure that government policies related to information and communication serve the best interests of the general population, especially people living in the global South.

URL: <https://www.apc.org/>

t: @APC\_News







**GLOBAL COMMUNITY  
NETWORKS INCEPTION  
MEETING IN KENYA**

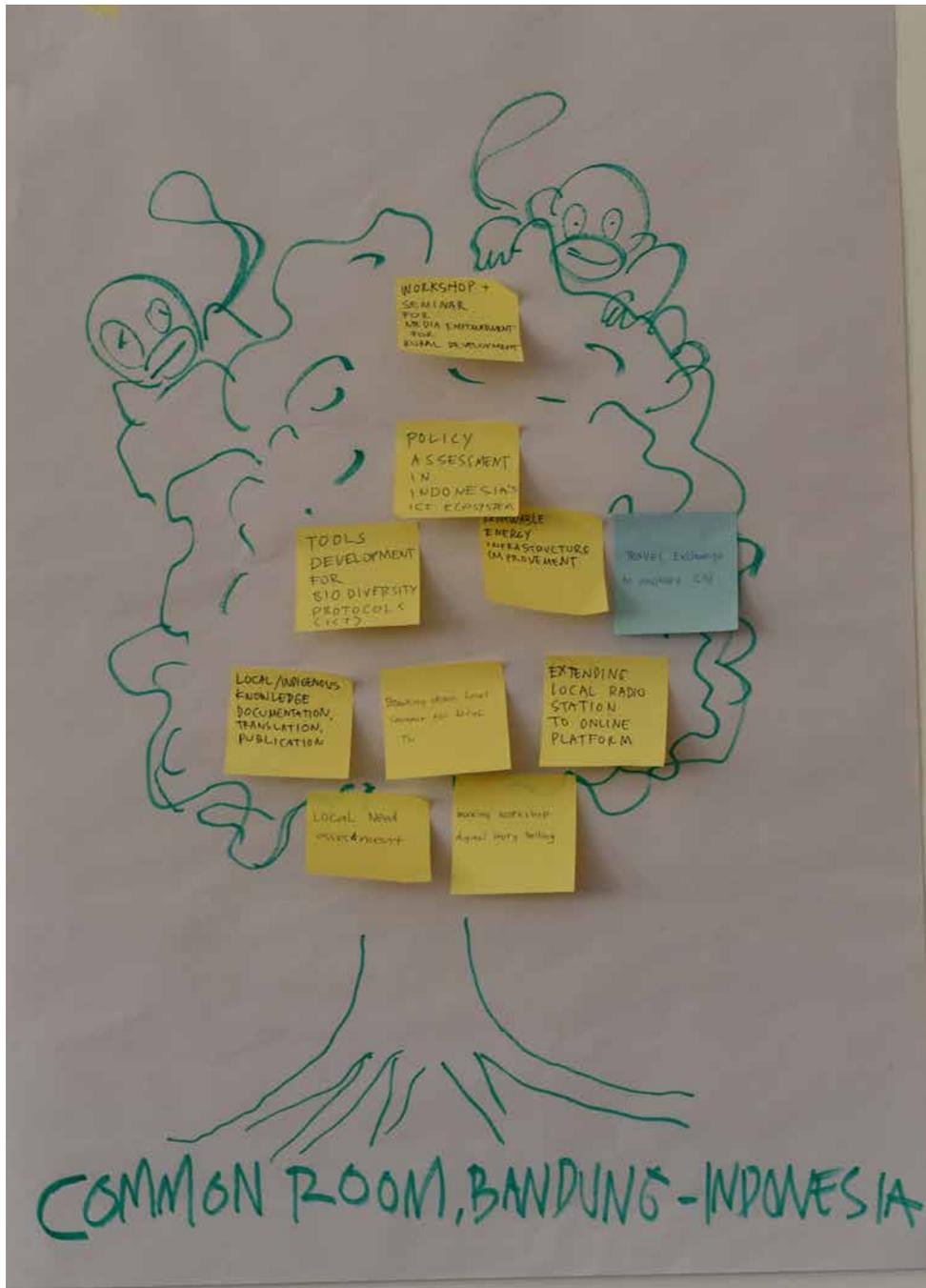
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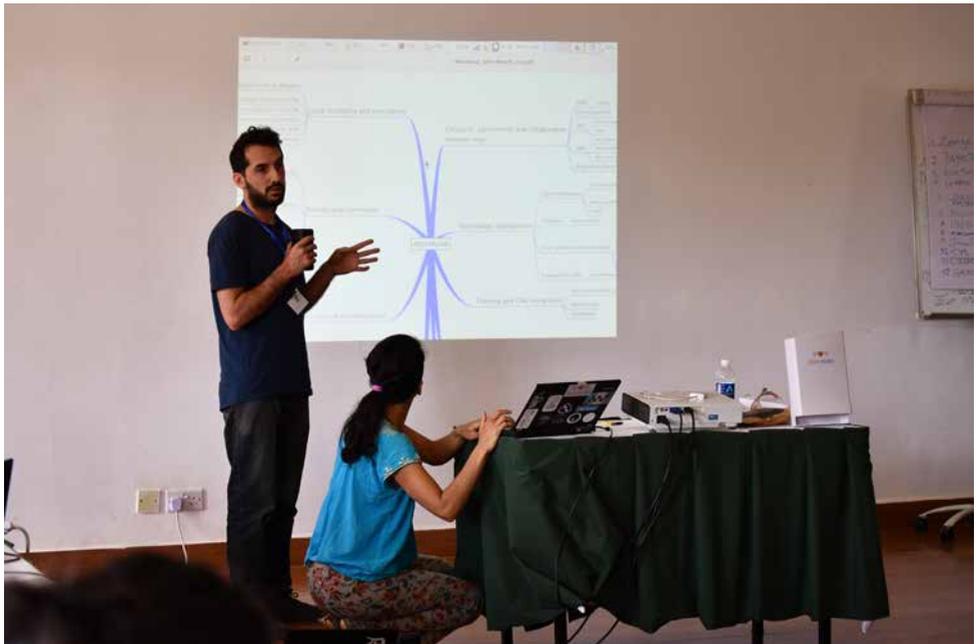
## GLOBAL COMMUNITY NETWORKS INCEPTION MEETING IN KENYA

To ignite the collaboration with several organizations from countries in Asia, Africa, and Latin America, APC organized a global inception meeting in Kenya. The meeting was attended by some APC representatives, as well as partner institutions that include BOSCO Uganda (Uganda), Ensemble Pour la Différence (Democratic Republic of Congo), Centre for Youth and Development (Malawi), Zenzeleni (South Africa), AlterMundi (Argentina), Colnodo (Colombia), Coolab (Brazil), Instituto Bem Estar (Brazil), Alternative Solutions for Rural Communities - ASORCOM (Myanmar), Servalots/Janastu (India), BAIF - Gram Marg (India), and Common Room (Indonesia).

This particular meeting was held from April 30 to May 2, 2019, in Lukenya Getaway that located in the Athi River region. The venue was situated near the Nairobi National Park, not far from the city of Nairobi. The inception meeting began with an introduction and discussion on the conceptual framework for the CNLG program and the joint planning of program activities. In earlier sessions, Mike Jensen and Kathleen Diga of APC gave a detailed explanation on the CNLG project. Each representative of the partner institution was then also asked to make an introduction to their activities and organization. In this particular session, the participants had the opportunity to learn more about a variety of activities organized by the attending organizations to utilize and develop media technology to empower the community. In general, most of the organizations had developed media empowerment programs in rural areas, including in some indigenous communities living in barely accessible forests, mountains and other remote locations.

Following the introductory session, the participants were invited to develop a Canvas Business Model detailing plans for CNLG activity to be developed in their respective organizations. They were also invited to take part in the planning process using the Mango Tree Activity to identify proposed activities to be developed over certain periods of time. The sessions proceed in a relaxed and interactive fashion. At the end of every session, the participants were asked to present, give questions, or provide input on several proposals developed by fellow attendants. During the meetings, some participants were also given the opportunity to present projects and initiatives that utilized internet technology as well as digital media in their respective countries. The activity was concluded with a visit to Tunapanda, a non-profit organization providing community-based internet services in Kibera region, Nairobi.









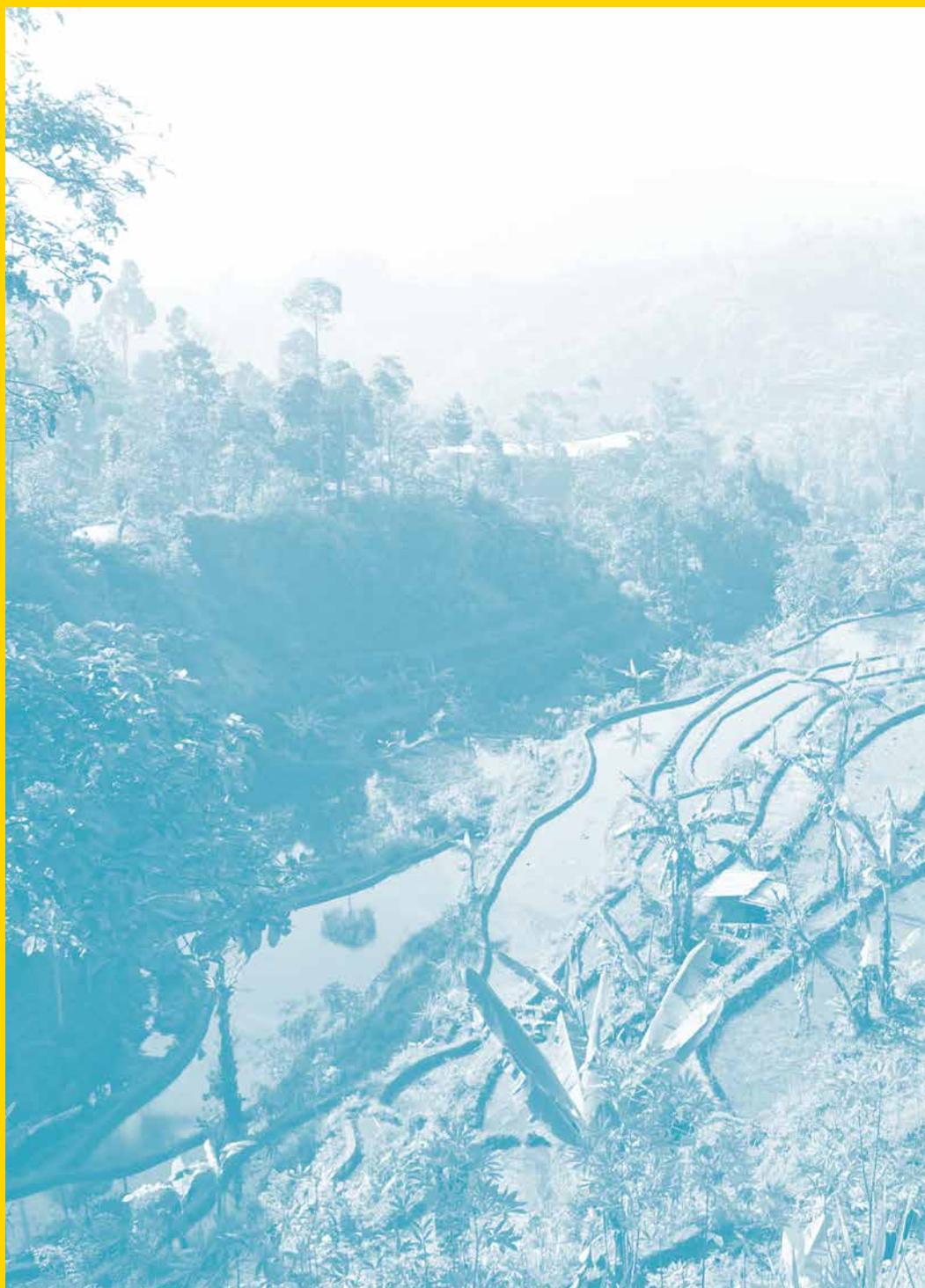


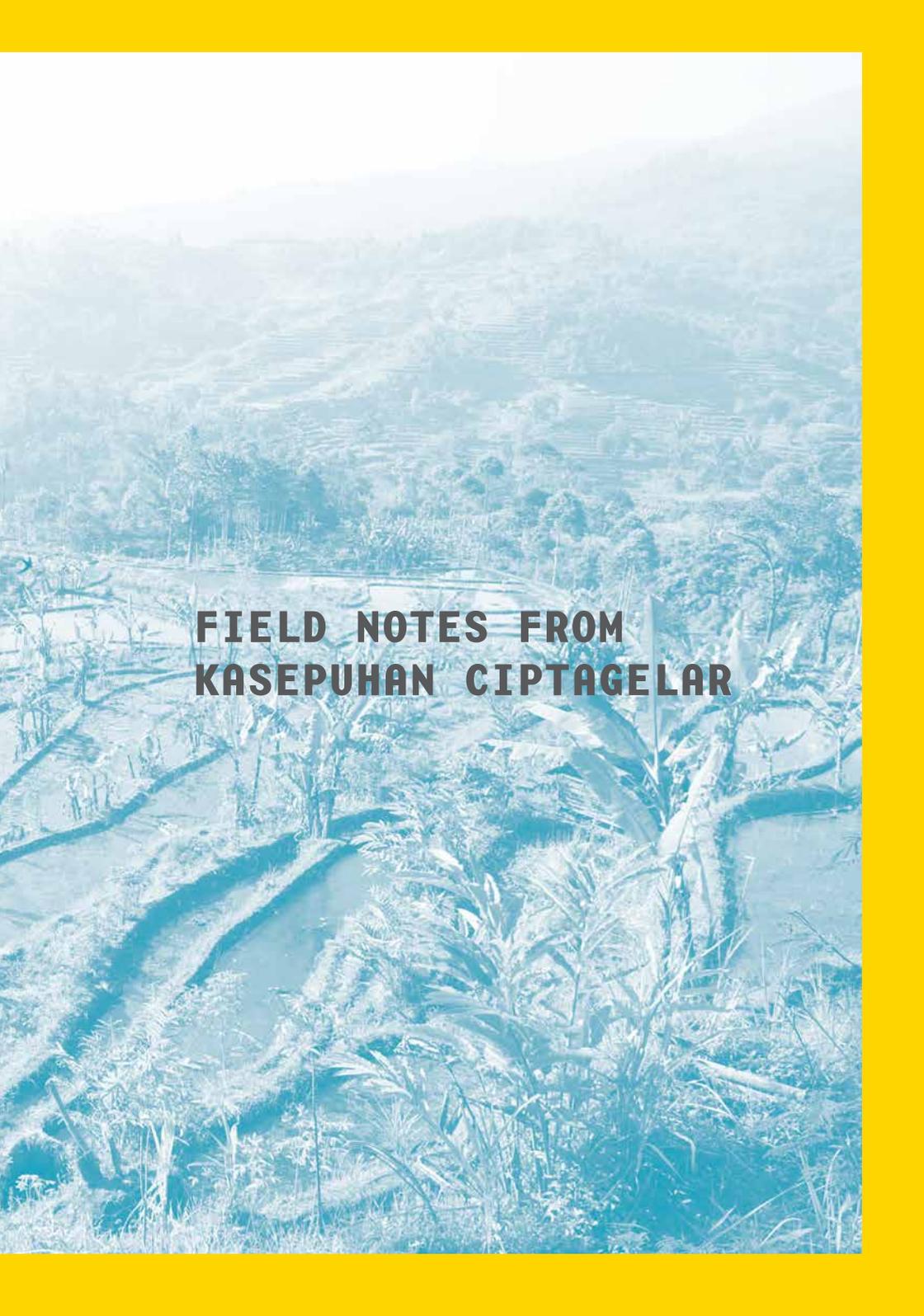






Graphic illustration co-created by the Locnet and APC fellows after the global community networks inception meeting in Kenya. This image is being created to promote and reflect the spirit and shared-value of community networks initiatives that support and nurture solidarity, as well as freedom and emancipation.





**FIELD NOTES FROM  
KASEPUHAN CIPTAGELAR**

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## FIELD NOTES

### FROM

## KASEPUHAN CIPTAGELAR

Kasepuhan Ciptagelar is an indigenous community who lives in the surrounding area of the deep forest of Halimun-Salak Mountain National Reserve (TNGHS) region. The term “Kasepuhan” is derived from the word “sepuh”, which in Sundanese language can be generally translated as “the elders”. The current kampung gede or the central village of Kasepuhan Ciptagelar indigenous community is located on the border of Banten and West Java Province since the year 2001. Based on the existing records, Kasepuhan Ciptagelar indigenous community is officially established in 1368 and has encountered several changes in leadership that are carried from many generations, which also includes some shifts on its central village location as they still preserving the nomadic tradition that is inherited from their ancestral beliefs.

In the state administrative level, Kasepuhan Ciptagelar is part of Sirnaresmi Village that is located at Cisolok district, Sukabumi regency, West Java province. Kasepuhan Ciptagelar is also part of Kesatuan Adat Banten Kidul and known as the core institution of the larger group of an indigenous community that is known as Baris Pangawin or Pancer Pangawin which resides in the south-west region of West Java and Banten province. Besides Kasepuhan Ciptagelar, there is also some other indigenous village in the area, such as Kasepuhan Cisungsang, Kasepuhan Cisitu, Kasepuhan Cicarucub, Kasepuhan Citorek, Kasepuhan Cibedug, etc. Some of these villages are being connected with a shared historical narrative, in particular with their culture and tradition.

Generally, Kasepuhan Ciptagelar indigenous community consists around 568 hamlets (Dusun/lembur) and 360 kampongs with around 25,000-30,000 populations. The existence of Kasepuhan Ciptagelar is known by most of the people in West Java and Banten province, especially among traditional communities in the south-west region. According to Kusnaka Adimihardja, the Kasepuhan Ciptagelar indigenous community still having a strong connection with the historical narrative of the ancient Kingdom of Sunda Pajajaran in which was in power until the latter half of the 16th century. Up until now, people of Kasepuhan Ciptagelar still adhere to the ancestral culture and traditions that rely on farming, especially paddy culture and cultivation which is strongly embedded with their unique existence and identity.





Based on the recent observation, there has been increasing challenges and vulnerabilities among the Kasepuhan Ciptagelar indigenous people because of the rapid development process in the surrounding area. This condition also puts pressure on the carrying capacity of the existing environment. On the other hand, increasing access to information and mobility of the community also triggers various forms of change and transformation that have an influence on the integrity of traditional institutions and culture among the Kasepuhan Ciptagelar community. Because there has been no official recognition from the government on indigenous territories, up until now the indigenous community of Kasepuhan Ciptagelar also rarely been involved in the planning and implementation of

the development agenda. As a result, development activities around the Kasepuhan Ciptagelar community region are being disembedded with the existing culture and tradition, as well as neglecting the environmental carrying capacity that has been nurtured for many generations.

#### **PAST PROJECT DEVELOPMENT IN KASEPUHAN CIPTAGELAR VILLAGE**

Common Room has been actively engaged to collaborate with the Kasepuhan Ciptagelar indigenous community since 2013. This initiative has become a seed activity for urban/rural collaboration platform that is developed in the following years. By the end of 2015, the initiatives were being included as part of the Innovation Factory project which was

supported by Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ). At that time, this particular activity was being developed under the topic of ICT for Agriculture (ICT4AG).

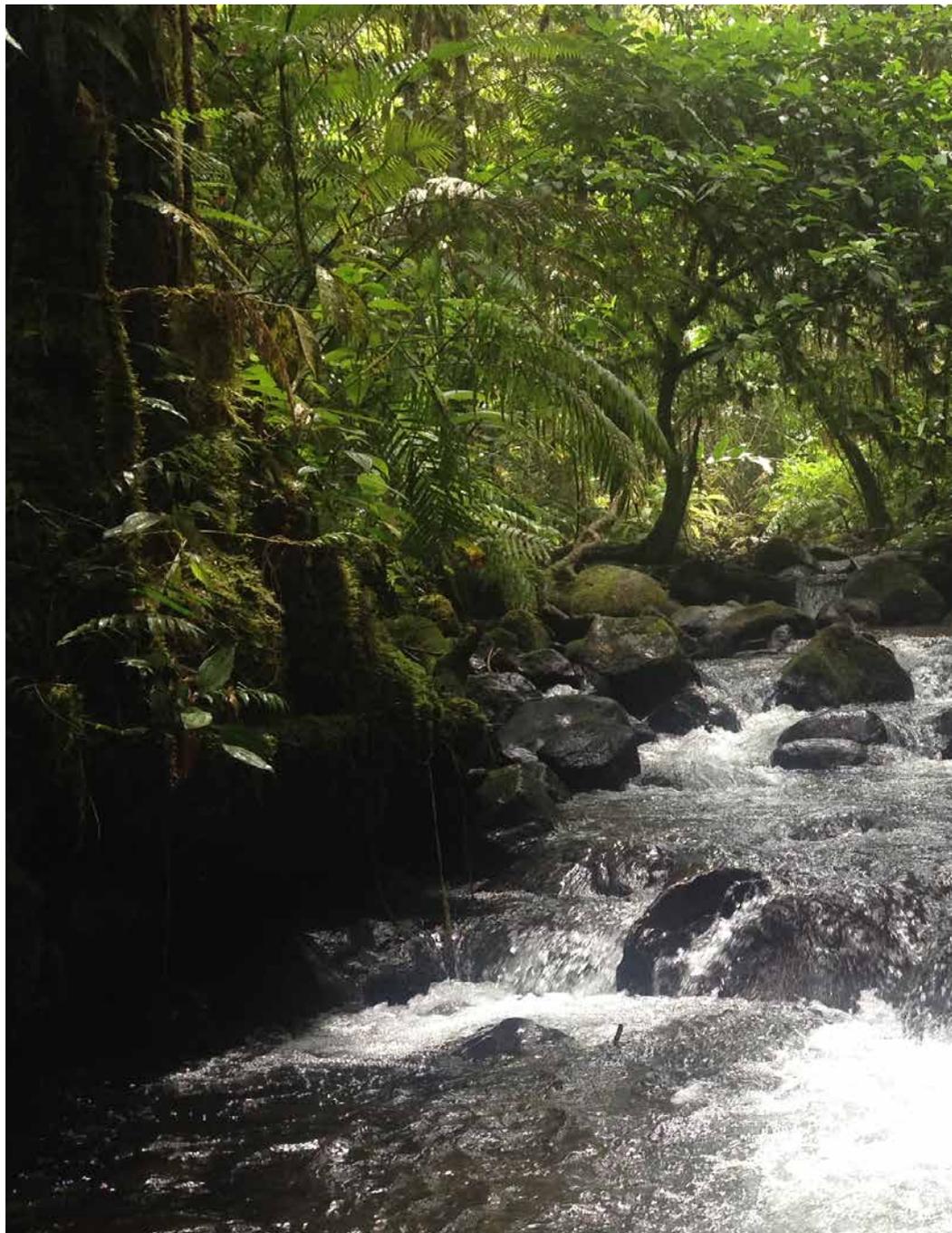
In early 2016, the kick-off meeting and workshop was organized in Gambung from 4-6 April 2016 to develop project ideas together with some representatives from Common Room, Kasepuhan Ciptagelar indigenous community and GIZ. This gathering was also participated by representatives from the Ministry of Planning and Development (BAPPENAS), The Ministry of Communication and Information Technology (KEMKOMINFO), as well as fellows from University of Padjadjaran (UNPAD) and Indonesia ICT Watch. The kick-off meeting and workshop is resulting in four core recommendations as to the following:

1. Forest conservation and protection
2. Cultural preservation and development
3. ICT/media utilisation and renewable energy development
4. Economic empowerment and livelihood improvement

After the kick-off meeting and workshop in Gambung, Common Room proposed and implement the development of mini data center to initiate a digital platform for local knowledge management in Kasepuhan Ciptagelar village as the 1st project prototype for Innovation Factory/ ICT4AG. To continue with the development of mini data center, Common Room and Indonesia ICT Watch continued to facilitate

experimentation on ICT/digital media platform in the village. As the follow up after the 1st project prototyping, Common Room proposes to undertake participatory mapping to collect data on indigenous land and cultural space in the region.

This participatory mapping was then being developed by the end of 2016 until early 2017, as a follow up from the previous study of farming culture and tradition in Kasepuhan Ciptagelar that strongly integrates paddy culture and cultivation with forest protection and conservation. By incorporating satellite data and in-field surveys, this project has managed to map and indicate around 13 core zone of protected forest area in Kasepuhan Ciptagelar region. The collaborative effort also able to recognize the importance of internet connectivity and digital media for rural development, in particular, to support data collection in regards to preserving local culture and tradition, as well as to advocate recognition and protection of indigenous land rights in the region. In general, this initiative is also strongly relevant with the need to support forest protection and conservation as part of the climate change adaptation and mitigation processes, which is also in line with the sustainable development goals (SDG's).





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## The Development Of Community Networks Initiatives In Kasepuhan Ciptagelar Indigenous Community

In late 2018, Common Room started to establish a collaborative effort with the Association For Progressive Communication (APC), an organization that concerns itself with the development of community networks in the Global South. On this particular encounter, APC has launched the Community Networks Learning Grant (CNLG) in support of efforts toward community networks empowerment and development in some countries in Asia, Africa, and Latin America. For this initiative, Common Room proposed the development of community networks in the Kasepuhan Ciptagelar indigenous community in West Java, Indonesia.

Following the preliminary research and study which was initiated by Common Room since 2013, the development of community networks in Kasepuhan Ciptagelar then being initiated in around March 2019 and followed with the implementation of Pathfinder Project that also supported by the APC. This initiative was being deployed collectively by the residents of Kasepuhan Ciptagelar with the assistance of Awinet, a local internet service provider (ISP) that is based in Bayah, Banten Province. The whole project was specifically aimed at supporting economic, social and cultural empowerment, as well as protection and conservation of the tropical forest area that is maintained by the Kasepuhan Ciptagelar indigenous community in the region.

For around three months, a team consisting of representatives from Common Room, Awinet and Ciptagelar residents conducted studies and development of community networks in the area. Kasepuhan Ciptagelar was chosen as the main focus of community networks project development in Indonesia due to its unique history, tradition and ancestral agricultural practices. Through the development of community networks initiative, it is expected that the indigenous community members of Kasepuhan Ciptagelar will be able to benefit from greater access to information and knowledge in a broader sense. Furthermore, this effort was also developed to support the production and distribution of local knowledge in regards to support the local community's cultural resilience and indigenous land rights recognition.



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## Local Internet Infrastructure In Kasepuhan Ciptagelar

In the past few years, internet access in the Kasepuhan Ciptagelar region has started to be provided by some telecommunication companies which mainly consist of some GSM operators and internet service providers such as XL Axiata and Telkomsel with 3G/4G wireless broadband connections. Up until now most people in the region are using this platform to access the internet connection even though it is expensive for most village inhabitants. The connection is also sometimes unstable, especially when there is a power failure happening in the area.

Common Room has been conducted a series of assessments and experiments to improve local internet infrastructure in Kasepuhan Ciptagelar village since 2016. This effort was part of the Innovation Factory/ICT4AG project implementation in Indonesia, which at that time tries to explore the utilization of OpenBTS technology together with Indonesia ICT Watch and Indonesia Raspberry community (Perintis). This team was also exploring the possibility to deploy VoIP Phone as an alternative communication platform, as well to assist the feasibility of deploying IPTV in order to expand the coverage area of CIGA TV, a community TV station that is managed by Kasepuhan Ciptagelar indigenous community. This initiative did not continue due to the lack of clarity of regulations for the use of OpenBTS technology, in addition to the lack of funding for the project continuation.

In early 2018, the wireless broadband connection in Kasepuhan Ciptagelar village was started to be developed by Awinet, a local internet service provider (ISP) company that is based in Rangkasbitung, Kabupaten Lebak, Provinsi Banten. To provide internet connectivity in the village, they were using sectoral antennas and MikroTik routers to broadcast Wi-Fi connections to the main internet backbone in the region. This gives an alternative option for people in the Kasepuhan Ciptagelar area to access internet connection. But as most villages in the Kasepuhan Ciptagelar region are located in an enclave and remote places, the internet connection still remains unstable and limited to some locations that are close to Kasepuhan Ciptagelar village. People in the Kasepuhan Ciptagelar area do not only use the internet for daily communication, but also for delivering data and information that are useful for local village government administration, health care, educational purposes, and economic activity. In some particular cases, internet connection also needed to address disaster response, environmental protection, and emergency situations that sometimes happen in some particular places. As for now, there has been a strong interest and necessity to improve local internet infrastructure in order to widen internet access coverage in surrounding regions.

There are plans to deploy further development for local internet infrastructure in order to provide an additional connection for around 8 villages in Banten and West Java Province namely Sirnaresmi, Sirnarasa, Cicadas, Margalaksana, Sukarame, Sirnagalih, Cirendang, and Gandasoli. Abah Ugi, the chief leader of Kasepuhan Ciptagelar indigenous community has made an effort by initiating Pancasuta, a startup company that aims to widen more affordable internet access and able to run and managed by the people in the village. They have started to collaborate with Indosat, a telecommunication company that operates in West Java province and also maintain the collaboration with Awinet that operates in the Banten area. Support and assistance are needed in order to have this initiative reaching its objectives, impact and sustainability.



Local Internet Infrastructure in Kasepuhan Ciptagelar

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## Brief Introduction To Awinet

PT. Awinet Global Mandiri (Awinet) is an internet service provider (ISP) that is based in Rangkasbitung, which located in Lebak District, Banten Province. The company was initially established as a community networks that are actively engaged in developing local internet infrastructure in Pandeglang and Rangkasbitung areas. In the beginning, the Awinet community developed an internet infrastructure that is based on self-taught skills and techniques. They learned the skills to develop internet network and infrastructure from online information sources, including the learning sources that are shared by Onno W. Purbo, a prominent figure in internet connectivity and community networks development in Indonesia.

In 2007, the Awinet community took part in a workshop on building internet transmission equipment known as Wajanbolic in Cisaat, Sukabumi. Following the workshop, the Awinet community applied the techniques to develop local internet infrastructure in Pandeglang using towers that are constructed out of bamboo. In the Sundanese local language, the word for bamboo is awi. The community, therefore, was referred to as Awinet. Later on, the name was redefined as the acronym for Alternative Wireless Internet (Awinet).

After some of this effort and early development stages, Awinet community began to deploy internet infrastructure in locations with poor internet access which

include Pandeglang, Rangkasbitung, Cilegon, Serang, Lebak and other surrounding areas. By using a simple network infrastructure, the Awinet community was able to provide internet access at an affordable price. The internet network was then utilized and managed using the principles of RT/RW net, the internet connectivity sharing concept developed by Onno W. Purbo.

In 2014, the Awinet community gradually began to restructure itself into an ISP company under the initiative of Numan Sumantri, Ropik, Rahmat Hidayat and Nana Tasmana. This development resulted in the establishment of PT. Awinet Global Mandiri in Kondang Jaya Village, in Cisata Sub-district, which is located around 30 km away from the Pandeglang District capital. The company was established on the basis of determination to develop and reap the benefit of information and telecommunication technology (ICT) in Banten region, which was still very limited at the time. Using labour-intensive techniques and equipment that are available, Awinet was started to provide internet access for the greater region.

In addition to providing internet access in Pandeglang, Awinet started to develop internet networks in various blank spots areas around Lebak District. At the time, most of the blank spots were in rural areas such as some of the hamlets in Cibaliung, Sumur, and Tamanjaya. Awinet then



continues to focus on providing internet access and local infrastructure in rural areas in Banten Province. In addition to providing internet services in their surrounding region, Awinet also partners with the Ministry of Communication and Information Technology to develop network installations in blank spots area across the country, including in Kalimantan, Maluku Islands, Papua, and many more.

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## Looking Back At The innovation Factory/ICT4AG in 2016

Prior to the development of the community networks in Kasepuhan Ciptagelar, Common Room had pioneered the deployment of a mini data centre in 2016. At the time, Common Room activities were conducted as part of the Innovation Factory project that focused on the utilization of internet technology for agriculture (ICT4AG). The mini data centre in Kampung Kasepuhan Ciptagelar had been established to manage local knowledge on a digital platform.

For this particular project, Common Room had facilitated a multi-stakeholder meeting on April 4-6, 2016 in Gambung, Ciwidey, West Java. The meeting was attended by representatives of the Kasepuhan Ciptagelar indigenous community, as well as some representatives from the Ministry of State Development Planning (Bappenas), Ministry of Communication and Information Technology, Padjadjaran University and Indonesia ICT Watch. The meeting has postulated the Gambung Mandate which proposes four main recommendations including support for conservation and protection of forests area; cultural protection and development; utilization of internet technology and renewable energy, as well as empowerment of the local community.

As a follow-up to the Gambung Mandate, Common Room proceeded to initiate a series of experiments to develop local internet infrastructure with some members

of the Indonesia ICT Watch. The initiative was then continued with participatory mapping activity to render a deeper insight and understanding into the Kasepuhan Ciptagelar customary law jurisdiction, as well as cultural spaces of the indigenous community in the region. Some of these projects and activities were conducted together with community empowerment activities, in particular to youth and woman. This series of activities were also able to identify increasing necessities to develop local internet infrastructure in order to sustain the various efforts that had been initiated in the region.







---

## Preparing The Local Community-based Internet Infrastructure

In order to conduct the preparation process for the development of community-based internet infrastructure in the Kasepuhan Ciptagelar indigenous people community region, Common Room held a series of discussions and observations that involves several representatives of Kasepuhan Ciptagelar community member together with the Awinet team. The preparation begins with the process of sharing experiences and preliminary study together with the Awinet team since early July 2019, which is then followed by several discussions with some representatives of Kasepuhan Ciptagelar community members to determine priority areas and villages that require internet connectivity.

After collecting some information and detailed study about some villages and locations that require internet connection, Common Room continued the planning process with the Awinet team to determine the technological options and equipment needed to provide internet access for existing villages. Initially, the Awinet team recommended developing a hybrid network by combining optical cables with wireless infrastructure to reach several villages that had difficulties in getting the internet connection. However, the team finally decided to use wireless networks as it is concluded to be more affordable and can be built more easily, besides more suitable for mountainous environments and forest areas that were relatively difficult to reach by optical cables.

The preparation process for the development of local internet infrastructure in the Kasepuhan Ciptagelar region was then continued with survey activities to several locations to validate the planned activities. Based on the surveys, it was decided to build base transceiver station (BTS) towers in several places that are located in Pangapungan, Cipakole, Cigaronggong, and Cihangasa. In addition, this survey also determined the location of radio stations for several villages in Cisuren Tonggoh, Cisuren, Cengkuk, Ciarca, Cisarua, Lebak Nangka, Kiara Koneng, Nanggerang, Cihangasa, Cigansas, Sirnarasa Kidul, Sirnarasa, and Ciptarasa. All of these places are located in some remote villages that have some difficulties in obtaining internet access.

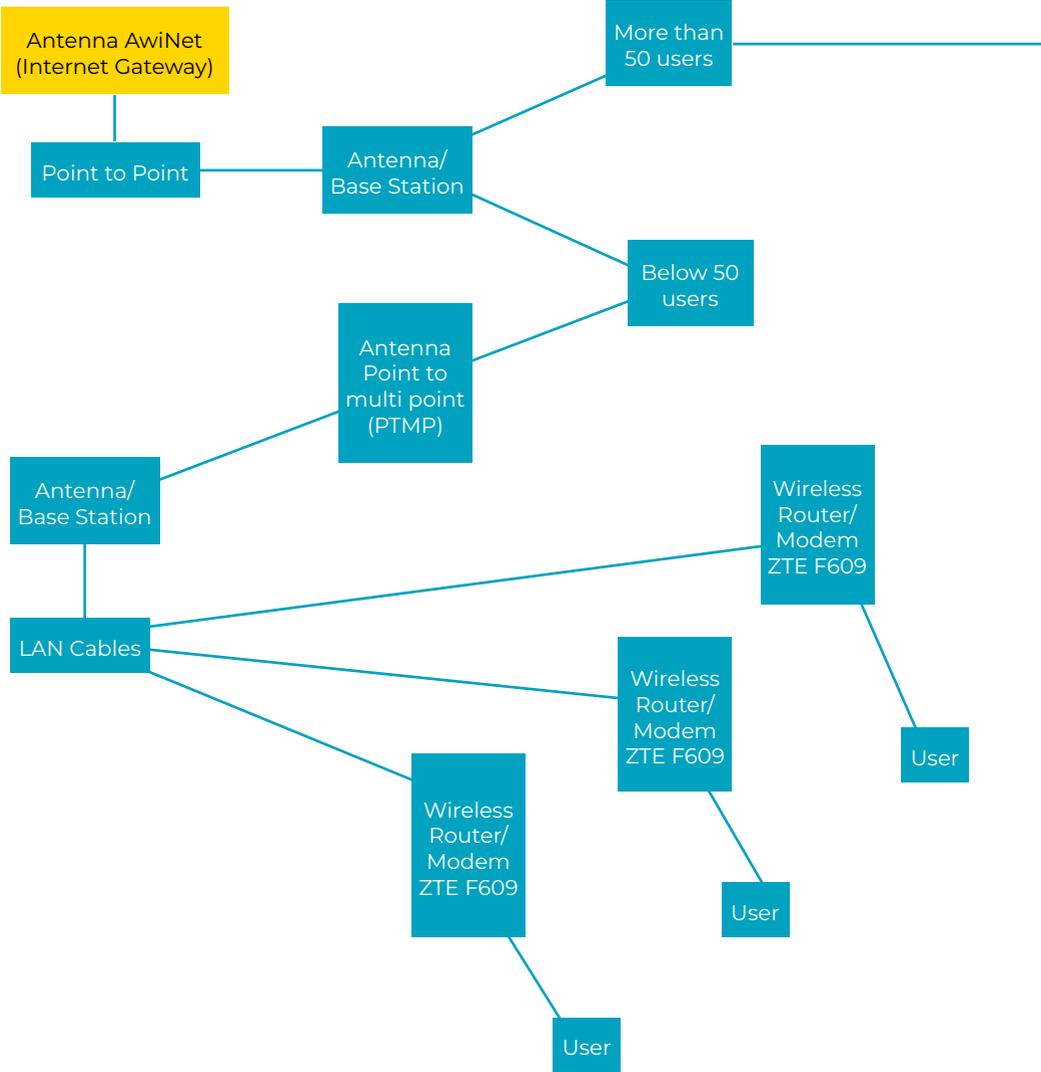
When the site preparation and survey process was completed, the Awinet team together with several representatives of Kasepuhan Ciptagelar community members held a workshop to proceed with the preparation and development of local internet infrastructure. This workshop is intended to prepare technical resources for the installation of the local internet infrastructure, as well as to develop a team that serves the local community in several villages so that they can use the internet and participate in selling internet vouchers. The development of the local internet infrastructure was then prepared at the end of July and began to be carried out gradually in around August. Along

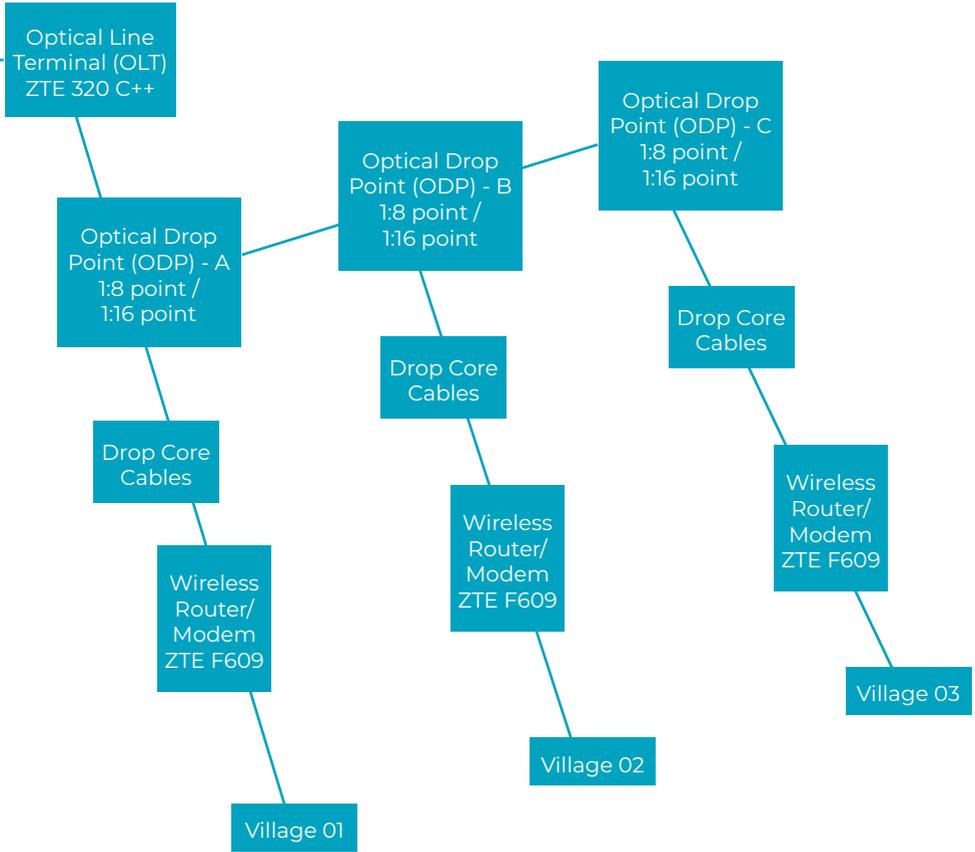


with the development of local internet infrastructure, local residents in several villages began to get internet access gradually.

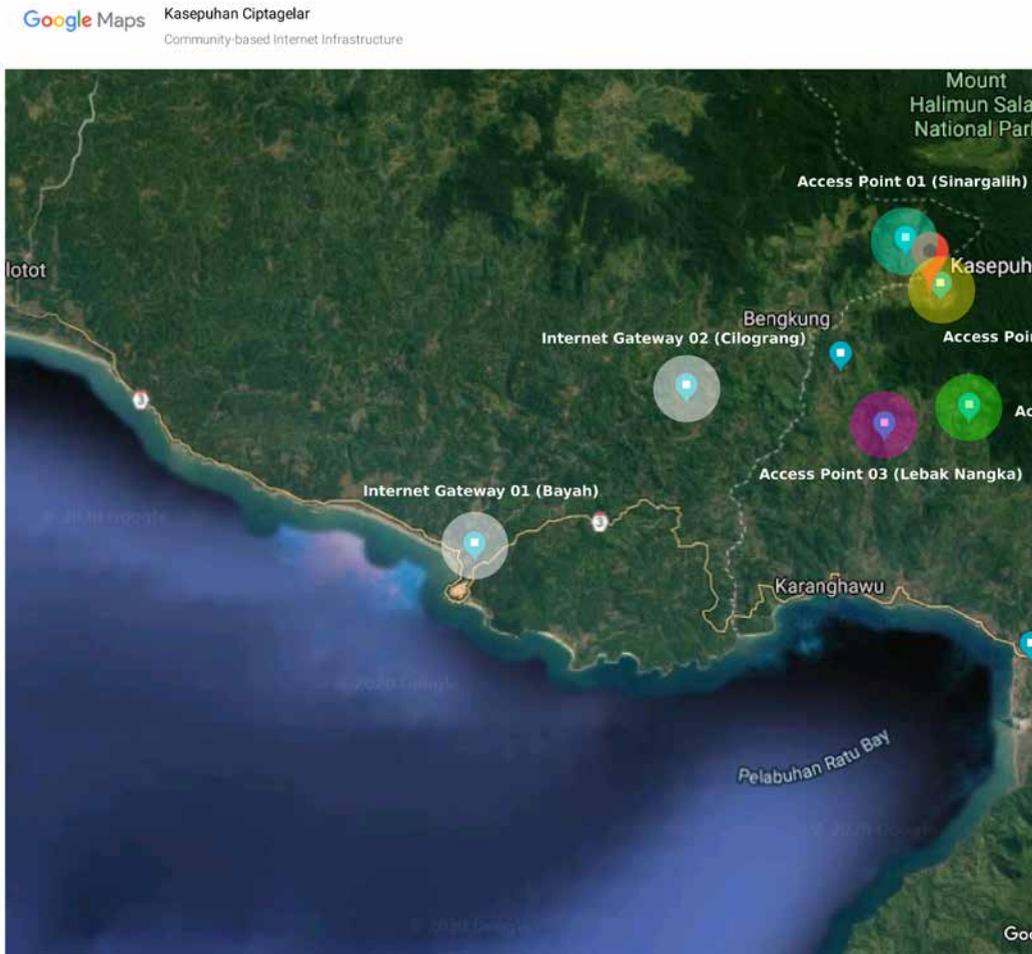
Up until now, the local internet infrastructure that has been developed is able to provide internet connectivity in around 13 villages for an average of 500 users every day. Within this development, there has been an increasing demand for internet access from other villages. The local community members who have been involved and received training in building and managing local internet infrastructure are now able to maintain and expand the internet networks independently, as at the moment it is run by 5 local technicians and 18 internet voucher agents. In the near future, some profits made from the sale of

internet vouchers is planned to be allocated to expand the reach of internet access to remote villages that are still located in blank spot areas. This effort will also be assisted by an ongoing capacity building process for the local communities so that the efforts to utilize and develop community-based internet infrastructure can be fostered with a sustainable approach.

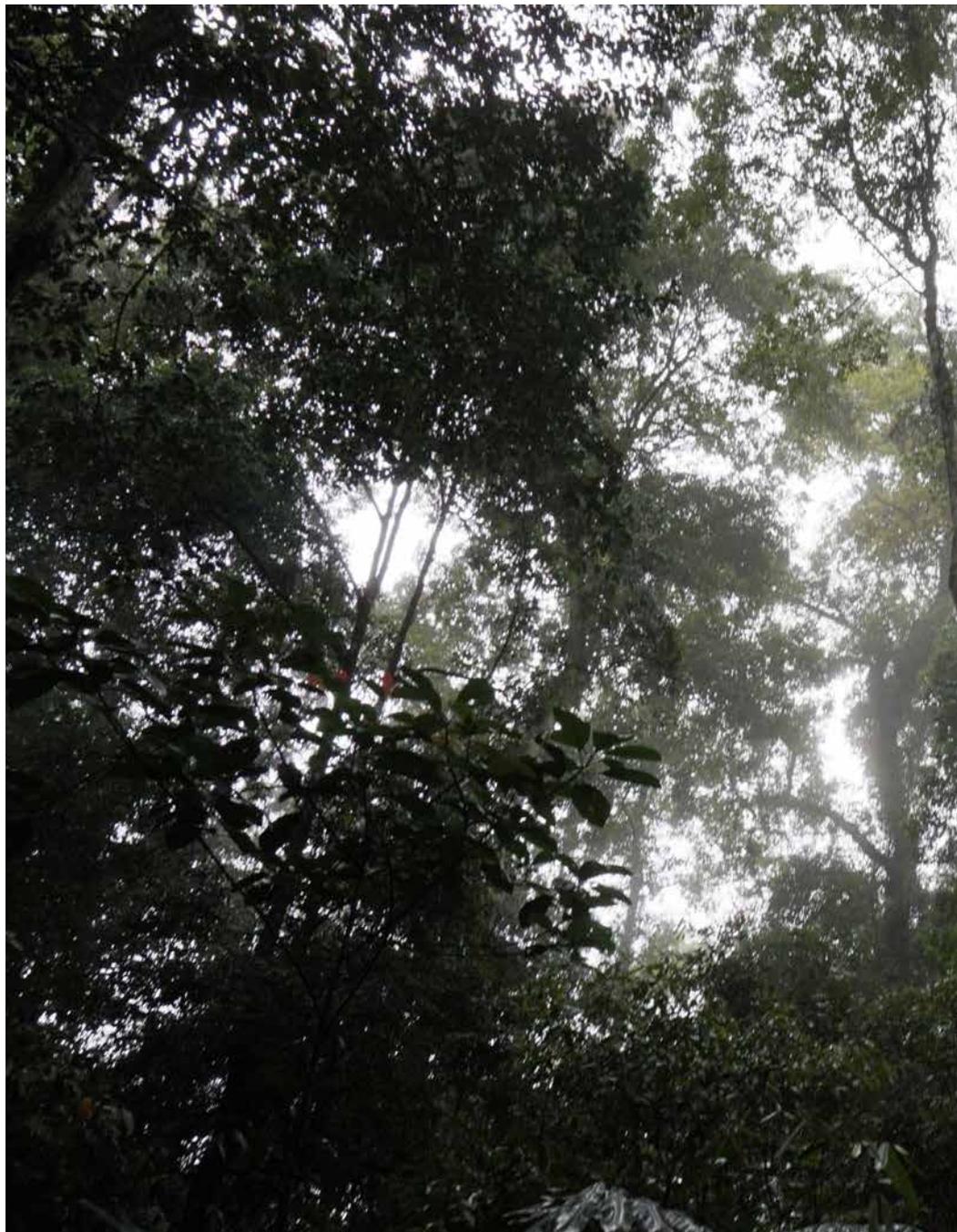




# Internet Ciptagelar Local Internet Infrastructure Development Plan









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## Local Community-based Internet Infrastructure Development

For the development of a local internet infrastructure within Kasepuhan Ciptagelar region, the residents were being facilitated to utilize the internet gateway that is managed by Awinet. To support this effort, the local indigenous community working collectively to construct some backhaul towers and establish a wireless connection which was being assisted by Awinet and Common Room team. Prior to this engagement, Awinet has already piloted the development of local internet infrastructure in Kasepuhan Ciptagelar village in September 2018. At that time, residents in several hamlets in the surrounding area was still experiencing difficulties to access internet connectivity. Currently, the community in the region has gradually able to access more affordable and reliable internet access.

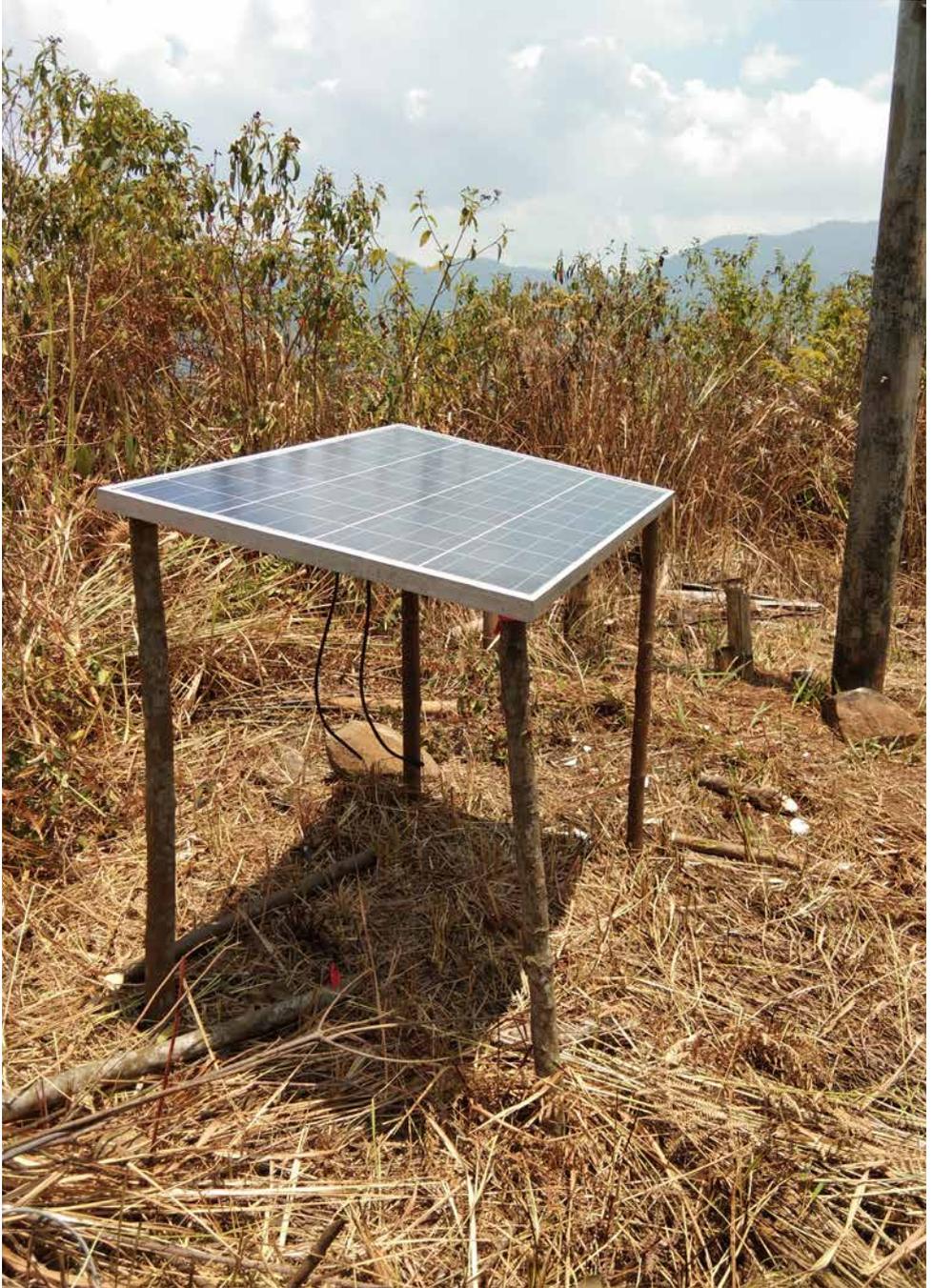
Internet access cost is covered through internet vouchers that are sold and managed by the local community. In addition to funding the network development, some profit made from the voucher sale is being re-invested into the maintenance and the development of internet networks and infrastructure in some areas that still have no internet access. Before establishing the local internet infrastructure, some residents were given special training by the Awinet team. The training was primarily aimed at prospective technicians and internet voucher vendors from each neighbouring hamlets.

The main obstacle in developing internet infrastructure in Kasepuhan Ciptagelar is the mountainous and forest areas that are difficult to access. Careful deliberation must be made to decide the location of backhaul towers and wireless access points to ensure that the internet could be made accessible in multiple regions simultaneously. The limitation on project budget also required the team to decide on priorities and develop the infrastructure in several stages. Nevertheless, with the support of the Kampung Kasepuhan Ciptagelar residents and their cooperation, the construction of the internet infrastructure could be completed without any discernible problems.

After the local internet infrastructure development process is being pursued, internet connectivity in some villages and hamlets is now beginning to run properly. Through the collaboration between the residents of Kasepuhan Ciptagelar, Common Room and Awinet, the community networks development that is supported by APC has reached a steady development. This project was able to facilitate more effective communication and information sharing among members of the community. Priority access to internet connectivity is also given to schools, subsidiary health clinics, and village administration offices to enable them to optimize basic services for the residents.

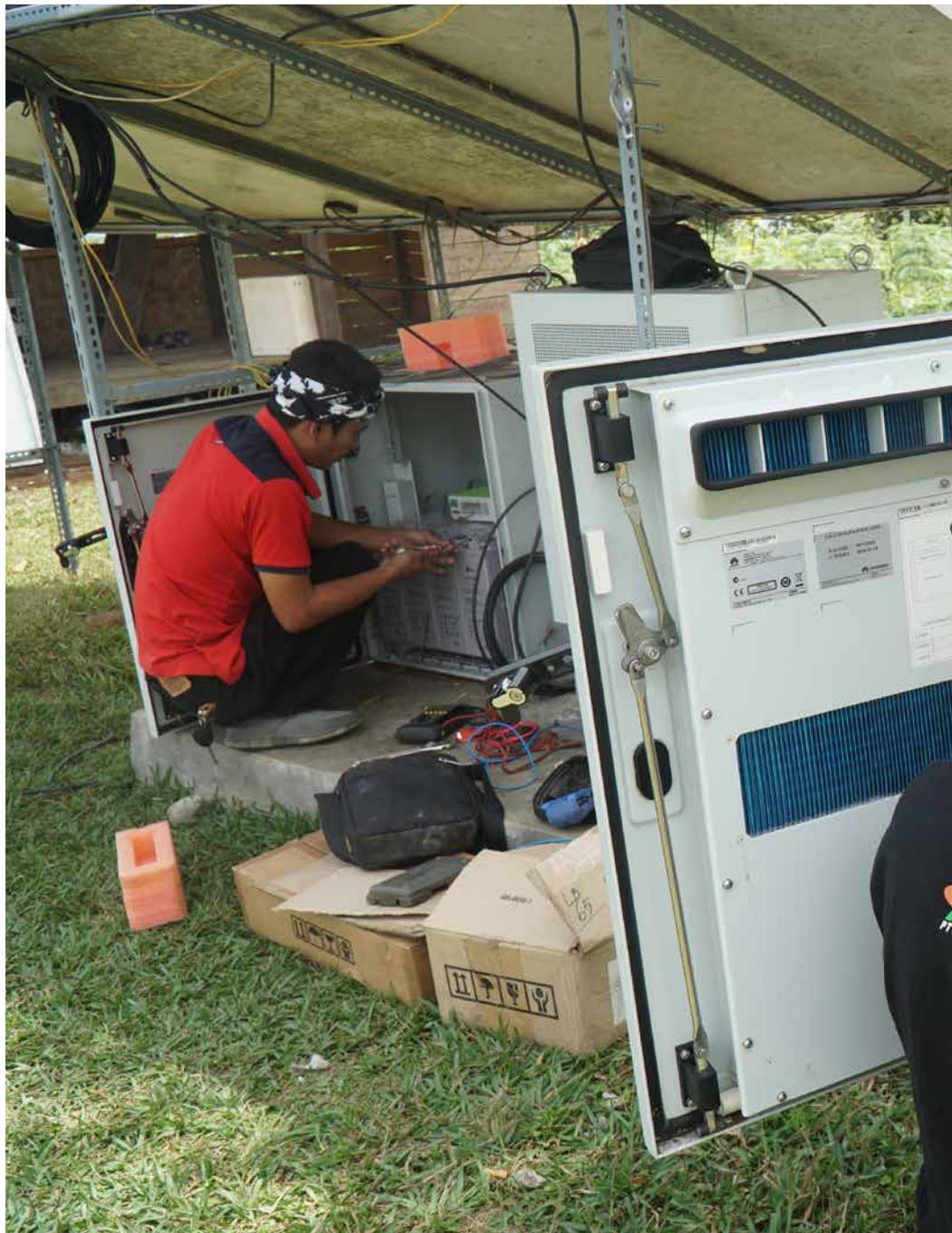


















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## Internet Utilization By The Kasepuhan Ciptagelar Indigenous Community

Apart from the effort to fulfil the necessity for effective communication and information sharing, in the long run, the development of local internet infrastructure in the region is expected to support the official state recognition of Kasepuhan Ciptagelar indigenous rights. This approach is also expected to increase deeper understanding of customary law that is in line with conservation and development of local culture and tradition, as well as the protection of the forest area in the region. In this particular context, internet connectivity is also expected to be able to support participatory mapping activities, as well to facilitate data collection and information gathering on the local knowledge, in particular to social, cultural, and regional aspects of the Kasepuhan Ciptagelar indigenous community.

The internet network in the region can also be utilized to support efforts to preserve and protect the tropical forest area, including youth and women empowerment programs. In the context of the internet utilization by Kasepuhan Ciptagelar indigenous community member, Abah Ugi as the indigenous community leader had expressed a wish for the development of media literacy programs for the youth, women and adults in some villages and hamlets that already having access to the local internet infrastructure. The objective is to ensure that the local residents are able to develop a safe and adequate internet utilization, besides to strengthen

the traditional social structure, local values, political participation, and cultural resilience in the region.

Apart from plans to conduct regular media literacy initiatives, it is also expected that the internet may be utilized to support the efforts to deploy environmental monitoring and protection, particularly for the forests area in surrounding the Kasepuhan Ciptagelar region, in which are also being protected by customary law. Environmental monitoring may be conducted through remote sensors that are linked to the local internet infrastructure. In this case, the data and information that is collected from the remote sensing devices may also enrich observation of the traditional agricultural patterns that have been preserved for generations. In the larger context, this approach can also enrich the local knowledge, as well as to the climate change adaptation and mitigation process.

Some aspirations on how the internet connectivity should be used by the community member of Kasepuhan Ciptagelar is expected to lead to further ideas and interests on how the internet may give benefit to the local knowledge production and distribution, as well to support the learning process in the broadest sense. In this context, the development of local community-based internet infrastructure in Kasepuhan Ciptagelar region is expected to not only open up learning opportunities on



how to make use of information and communication technology (ICT) in rural areas but also supporting knowledge production and distribution on related issues to food sovereignty, climate change mitigation and adaptation, as well as the collective effort in the implementation of sustainable development goals (SDGs).





Internet Utilization By The Kasepuhan Ciptagelar Indigenous Community





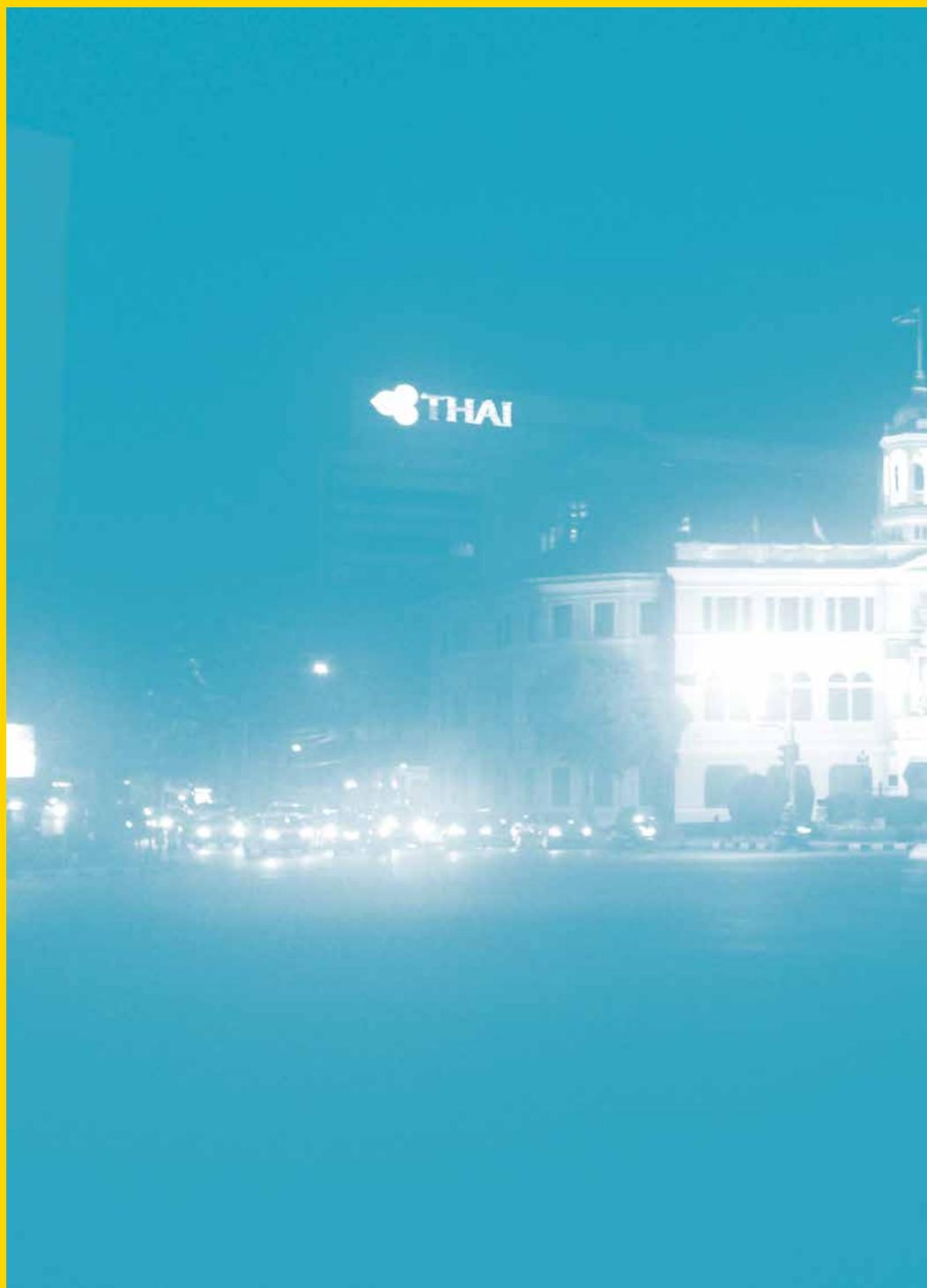












A nighttime photograph of a street in Bangkok, Thailand. In the background, a large, white, classical-style building with a dome is visible. The street is illuminated by streetlights, and several cars are driving, their lights creating a blurred effect. The overall scene is captured in a cool, blue-toned color palette.

**BRIEF NOTES ON  
ASIA-PACIFIC  
REGIONAL COMMUNITY  
NETWORKS SUMMIT 2019  
IN BANGKOK**

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## BRIEF NOTES ON ASIA-PACIFIC REGIONAL COMMUNITY NETWORKS SUMMIT 2019 IN BANGKOK

The Association for Progressive Communication (APC) in cooperation with the Internet Society, and the United Nations Economic and Social Commission for Asia and the Pacific (UN ESCAP) was organizing the Asia-Pacific Regional Community Networks Summit 2019 at the United Nations Convention building Center (UNCC) in Bangkok from 28th until 29th August 2019. This activity was carried out in conjunction with the Asia-Pacific Information Superhighway Steering Committee (AP-IS) and The World Summit on the Information Society (WSIS) regional meeting that was co-organized at the same place.

Representatives from APC were attended by Carlos Rey-Moreno, Talant Sultanov, and Chat Garcia Ramilo. Meanwhile, representatives from the APC networks that were present included Gustaff H. Iskandar (Common Room, Indonesia), Sarbani Benerjee Belur (Gram Marg, India), Vedanthi Giri (Janastu, India), and Michael Suantak (ASARCOM, Myanmar). Also attending this meeting is Ritu Srivastava who is community networks and community radios practitioner and researcher that is based in Mumbai, India. Some of the things discussed in this meeting include the latest trends in the development of community-based internet networks, as well as cross-stakeholder dialogue related to the formulation of policies and strategies for providing affordable internet connectivity.

Before taking part in the Asia-Pacific Regional Community Networks Summit 2019, the APC network member was having an internet 101 policy and regulation workshop that was facilitated by Carlos Rey-Moreno on August 28, 2019. Representatives from the APC community networks were invited to be involved to develop a wiki platform which is aimed to provide various information related to internet policies and regulations in various countries, especially some countries that are involved in the efforts to develop community networks project and initiatives. This wiki platform is expected to be the source of information and knowledge exchange platforms about policies and strategies to develop community-based internet networks and infrastructure in respective countries.

Some of the APC networks representatives that consist of Talant Sultanov, Vedanthi Giri, and Sarbani Benerjee Belur took turns as speakers for several meeting sessions in the Asia-Pacific Regional Community Networks Summit 2019 at the UNCC building on 29th of August 2019. The focus of these sessions is to present a number of examples



from community networks development and initiatives that are important to encounter the problem and challenges of the digital divide. In this particular context, the development of community networks development is also seen as an important strategy that can support the implementation of a sustainable development agenda (SDGs). One important conclusion of this meeting was the emerging necessities for multi-stakeholder collaboration, in addition to the need to develop policies and regulation that support the development of community-based internet networks and infrastructure so that this initiative can continue to develop and have a significant impact.

More info about Asia-Pacific Regional Community Networks Summit 2019 can be accessed through the following URL: <https://www.internetsociety.org/events/asia-pacific-regional-community-networks-summit/>





**LIVE-IN ACTIVITIES  
IN KASEPUHAN  
CIPTAGELAR**

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## LIVE-IN ACTIVITIES IN KASEPUHAN CIPTAGELAR

As part of the implementation of the Community Networks Learning Grant (CNLG) program that is supported by APC, Arum Tresnaningtyas Dayuputri is conducting live-in activities in order to develop research, observation and workshop in the Kasepuhan Ciptagelar Village from 25th July to 8th of September 2019. Some of the activities carried out include introducing basic video and photography to some students from SMP 4 Cisolok Satu Atap (state junior school) as well as music workshop and the making of video clips on “Sakola Adat” children song.

This series of activities is part of a digital storytelling and video blog (vlog) workshop in which was being facilitated by Arum together with Taufik Darwis, Ferry Gellunny Putra, and Siswandi. This activity is one of the approaches taken to improve media literacy and digital skills in producing digital content among Kasepuhan Ciptagelar indigenous community, especially among women and youth community. Before carrying out this activity, the team was asking permission and discussing the plan with Abah Ugi who is the chief leader of Kasepuhan Ciptagelar indigenous community.

In order for all activities to run smoothly, the four artists who are facilitators of this activity learn to blend become part of the daily lives of the local residents. In addition to adhering to customary rules in the Kasepuhan Ciptagelar area, they also participated in a number of rituals and cultural activities in order to be accepted and become part of the community. To improve media literacy and skills in producing digital content, the team collaborates with some teachers at the local schools to integrate workshops and learning activities together with the students.

During the live-in activities and media literacy workshop, Common Room also participated in documenting some ritual activities and cultural events that were an important part of the process of research and observation on local culture in the implementation of the CNLG project and activities. Some of the content generated from this activity is broadcast through CIGA TV stations, as well as being uploaded to the YouTube channel so that it can be accessed by the local community as well as by a wider audience. This effort is expected to be able to encourage the process of documentation, production, and dissemination of local knowledge, in addition to supporting the use of the internet and digital media for the meaningful communication process.











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## Learning About Digital Storytelling

Together with the development of community networks project implementation in the Kasepuhan Ciptagelar region, the Common Room also initiated a digital storytelling workshop in able to manage local content production that could be disseminated through the internet and social media platform. This local content development effort was facilitated by Arum Tresnaningtyas Dayuputri, an artist and musician who often works using video and photography.

This activity was also assisted by three other artists, namely Taufik Darwis, Ferry Gellunny Putra, and Siswandi. These four artists are at the same time is carrying out the Seniman Mengajar program that facilitated by the Directorate of Arts, the Ministry of Education and Culture (Kemendikbud). The approach taken to develop local content in the Kasepuhan Ciptagelar region is to introduce the ability to tell stories using digital media. This activity began with basic training on video and photography for youth community in Kasepuhan Ciptagelar village.

In addition to the basic introduction to photography and video, the workshop was also complemented by basic storytelling training facilitated by Taufik Darwis. Beginning with the introduction of insight into the importance of storytelling, Taufik also teaches basic theatre techniques to support mastery in delivering information using a narrative expression. In the field of

photography and video, training was also facilitated by Ferry Geluni who introduced basic techniques to the children by using appropriate methods and techniques. On this occasion, Siswandi also introduced techniques to process and sharpen story using journalistic basic principles. This approach is also used to explore and produce visual content.

The training was held for approximately around 2 weeks in SMP 4 Cisolak Satu Atap (state-run middle school) in Kasepuhan Ciptagelar village, in particular for students in grades 7, 8 and 9. In this activity there were around 60 participants involved. When the activity was carried out, participants were divided into 12 groups and given the opportunity to create works using video and photography. The basic video and photography training was last for 3 days, from 19 to 21 August 2019. From this activity, around 12 digital content has been produced with an average duration of 2-3 minutes. The work of the workshop participants was then broadcast through CIGA TV, a community TV station run by local residents. In addition, all of this work was also uploaded to the YouTube channel and distributed on various social media platforms.











## COLLECTING GRASS TO FEED THE GOAT (NGARIT)

Ngarit is a daily activity of collecting grass to feed the goat. This particular activity is usually done by a young boy or an adult male in the family. This story was made by Group 4 from the Digital Storytelling workshop in Kasepuhan Ciptagelar Village. The video can be accessed through the following URL: <https://youtu.be/sYdL9NDY0SE>







## THE POUNDING RICE TRADITION (NUTU)

Nutu is a daily activity of pounding the paddy and preparing the rice using a wooden rice pounder. This work is usually a task for young girls and an adult woman in the family. This story was made by Group 6 from the Digital Storytelling workshop in Kasepuhan Ciptagelar Village. The video can be accessed through the following URL: <https://youtu.be/HKTEAIXA9VU>



## LEARNING HOW TO MAKE BAGS FROM WILD RATTAN (KANERON)

Kaneron is a bag made out of wild rattan that collected from the forest. This craftwork is usually made by the people of Kasepuhan Ciptagelar during their free time. This story was made by Group 5 from the Digital Storytelling workshop in Kasepuhan Ciptagelar Village. The video can be accessed through the following URL: <https://youtu.be/IQ72Nh-TUxo>





## Creating Songs with The Children in Kasepuhan Ciptagelar Village

As part of the digital storytelling workshops that involve residents of Kampung Kasepuhan Ciptagelar, Arum Tresnaningtyas Dayuputri also facilitated music and songwriting workshops with the children. This activity is intended to improve the ability of the children to express and speak through music in a simple way.

For several days, children were involved in composing songs that reflect their daily life in Kampung Kasepuhan Ciptagelar. A song which was created from this particular activity was given with the title “Sakola Adat” or Adat School. The lyrics of this song are written by Aki Dai, a local traditional bamboo music artist (angklung buhun) who is also part of customary artists (juru tatabeuhan) who often accompanies ritual activities using angklung and bamboo percussion (dogdog) along with the traditional music group named Ciung Wulung. This particular song tells about how children learn in the milieu of indigenous peoples in order to maintain ancestral values and uphold the customs and culture of the local community.

The lyrics of the song and general translation that was created are as follows:

Sakola Adat  
 Yu batur masing jalujur  
 Hirup ulah rek takabur  
 Sakola paluhur luhur  
 Cekel amanat luluhur  
 Sakolah jaman ayeuna

Kuresep kabina bina  
 Kusabab loba guruna  
 Daratang timana-mana

Sakola di Ciptagelar  
 Matak sumanget diajar  
 Da guru loba nu anyar  
 Anu arek ngadon ngajar

General Translation:

Customary School  
 Come on my friend, let's be honest  
 Live our life and don't be arrogant  
 Going for school and look for higher status  
 It is better to hold to your ancestral values

Going to school today  
 That is fun and full of joy  
 We have a lot of teachers  
 They come from everywhere

Going to school in Ciptagelar  
 It makes a strong passion to learn  
 We have some new teachers  
 Who shared a strong interest to teach

The video of this song can be accessed through the following URL: [https://youtu.be/tGRKO-\\_tNMg](https://youtu.be/tGRKO-_tNMg)



Creating Songs with The Children in Kasepuhan Ciptagelar Village





Creating Songs with The Children in Kasepuhan Ciptagelar Village





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## Woman's Role and Daily Life in Kasepuhan Ciptagelar

Kasepuhan Ciptagelar is one of the few Sundanese traditional communities that is very dependent on paddy culture and cultivation. Almost all aspects of their culture, tradition, daily life and their identity are centred on the culture and tradition of growing paddy. Up until now their agricultural practices still follow the values and principles inherited from their ancestors (karuhun). The Kasepuhan Ciptagelar indigenous community also believes that paddy is a blessing from Batara Guru and is a symbol of life. Paddy is respected in such a way that it reflects the belief system and values that are inherent in the spiritual concept of "Sang Hyang Nyai Sri Pohaci" as a spiritual figure symbolizing

a woman's body. The position of rice and women's equality in the cycle of culture, tradition and daily activities so that the role of women is spread across various types of domestic space. Most of the women in the Kasepuhan Ciptagelar indigenous community are involved in paddy planting process, including harvesting, processing and its derivatives so that the position of women has an important role in certain activities such as taking paddy from the barn (leuit), pounding rice in rice pulverizer made of wood (lisung), as well as storing and cooking rice. All of these activities are attached to the tradition, rituals and cultural life of the Kasepuhan Ciptagelar indigenous community in general.





















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## Rorokan and Customary Institution In Kasepuhan Ciptagelar

In carrying out the cultural, traditional life and daily activities, the Kasepuhan Ciptagelar indigenous community has a customary institution that is led by an Abah (father) which is accompanied by Emak (mother). To carry out his role as the customary leader, Abah is assisted by Rendang Kande (personal assistant) as well as a number of Rorokan (cabinet) who had specific roles and responsibilities. At the hamlet and village level, Abah's role is also assisted by representatives referred to as the Kolot Lembur or Sesepuh Lembur (village elders). In addition to that, there is also Baris Rendangan which is the family elder's representative. The Rorokan position usually consists of 7 task force, namely Rorokan Jero, Rukokan Kadukunan, Rorokan Kapenghuluan, Rorokan Pamakayaan, Rorokan Paninggaran, Rorokan Bengkong, and Rorokan Pantun. The rights, authority and responsibilities of each Rorokan differ from one another. For example, Rorokan Kadukunan is responsible as the person in charge of various traditional ritual activities and belief system, while Rorokan Pamakayaan is responsible for managing and coordinating all activities related to agricultural activities, in particular to certain rituals in the paddy cultivation process. The existence of these traditional structures and indigenous institutions generally regulates the local value, belief system and social hierarchy, regional and environmental arrangements, as well as various daily activities of indigenous community member that are

rooted in paddy culture and cultivation. Even though most of the position in this customary institution is being determined by the lineage, in certain cases it is also being navigated by specific skill and knowledge which belong to certain individuals. The customary institution can also develop branches in which is adaptive to certain need and situation. For example, when the people of Kasepuhan Ciptagelar started to utilize the micro-hydro power plant back in 1997, subsequently there is a new position called Juru Turbin (micro-hydro technician and operator) that works under responsibilities of Rorokan Jero.















## Serentaun, Harvest Festival and Paddy Rituals In Kasepuhan Ciptagelar

At the end of the live-in activity that is carried out by Arum Tresnaningtyas Dayuputri, people at the Kasepuhan Ciptagelar Village were busy with the preparations for Serentaun. This particular activity is an annual cultural ritual that is held every year and is generally similar to a harvest festival. However, Serentaun which is also often called Serahtahun, is not an ordinary harvest festival, because the harvesting season in the paddy fields is usually already completed several months before the Serentaun activity is being held. As the name implies, Serentaun is generally meaning as yearly celebration ritual

which also marks the new paddy planting season. This year the Kasepuhan Ciptagelar indigenous community marks the 651st Serentaun celebration after they started the tradition (Ngalalakon), which was officially being initiated by their ancestors in around 1368.

The series of Serentaun activities usually started after the harvest season (Mipit) has been completed. Some activities carried out by residents in welcoming this particular cultural ritual usually consist of Nganyaran (cooking rice harvested in the current year), Serah Ponggokan







(traditional census), which later welcomes the highlight of Serentaun that is marked by the ritual of storing paddy (Ngadiukeun Pare) in the sacred barn (Leuit Si Jimat). Serentaun activities this year is being conducted from 6th to 8th September 2019. After the series of Serentaun activities are completed, the whole cultural ceremony will then be continued with the Salamat Rasul tradition, which is a community gathering and blessing rituals that take place exactly 1 day after the Serentaun is finished. Furthermore, all community members usually will directly carry out the Turun Nyambut activity in the next day to start the new rice planting season.

In the Serentaun activities, there are many traditional arts and cultural performances that are held to celebrate the event for three days in a row. In the midst of the thousands of people who are coming from many places, the indigenous community member of Kasepuhan Ciptagelar usually

initiates Serentaun activities by holding a blessing ritual which is then followed by a certain procession, as well as the carnival to carrying the paddy with bamboo bearer (Ngarengkong). This also includes the exhibition of certain agricultural products, tools, and traditional crafts. In addition to this, there are also Debus performances (traditional martial arts), Dogdog Lojor (bamboo music performances), Wayang Golek (wooden puppet show), Mask performance, Jipeng music, Dangdut concerts, etc. The ritual of storing paddy in the sacred barn as the main feature of Serentaun is usually being led directly by Abah Ugi together with Mamah Alit, who is escorted by some close relatives and guided by Aki Karma as Rorokan Jero. The whole ritual is accompanied by Angklung Buhun (ancient bamboo music performances) and traditional Sundanese lamentation and elegy (Pupuh) that glorify, praise and welcomes the presence of Sanghyang Sri, the rice goddess.







Serentaun, Harvest Festival and Paddy Rituals In Kasepuhan Ciptagelar





Serentaun, Harvest Festival and Paddy Rituals In Kasepuhan Ciptagelar





Serentaun, Harvest Festival and Paddy Rituals In Kasepuhan Ciptagelar





Serentaun, Harvest Festival and Paddy Rituals In Kasepuhan Ciptagelar



**BPPT**  
**BADAN PENELITIAN DAN PENERAPAN TEKNOLOGI**

**DIALOG NASIONAL  
INDONESIA INTERNET  
GOVERNANCE FORUM 2019**

**IGF  
INDONESIA**

**"INTERNET PUNYA SIAPA?"**

**DATANG PARA PESERTA**

**NOTES FROM THE  
INDONESIA INTERNET  
GOVERNANCE FORUM 2019  
(ID-IGF)**



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# NOTES FROM THE INDONESIA INTERNET GOVERNANCE FORUM 2019 (ID-IGF)

As part of the implementation of the empowerment and community networks development in Indonesia, Common Room in collaboration with the ID-IGF 2019 organizing committee held a multi-stakeholder meeting session on Wednesday, 9th of October 2019 at the BPPT Building in Jakarta. This session was moderated by Ivan Lanin from the Wikimedia Indonesia and presented 3 speakers namely Dr. Joko Santoso (Head of the Indonesian National Library), Dinita Andriani Putri (Web Foundation), Ivonne Kristiani (Deputy Chair of Wikimedia Indonesia), and Gustaff H. Iskandar (Common Room).

In this particular session, Dr. Joko Santoso explained the efforts made by the Indonesian National Library in strengthening literacy culture to improve welfare through the transformation of library functions based on social inclusion. According to Dr. Joko Santoso, the number of libraries in Indonesia currently ranks second in the world with around 164,610 libraries. This number is below India with 323,605 libraries. So far, the direction of the transformation of libraries based on social inclusion in Indonesia is divided into 3 sectors, namely as a centre of knowledge, a centre of culture, and a centre of community activity.

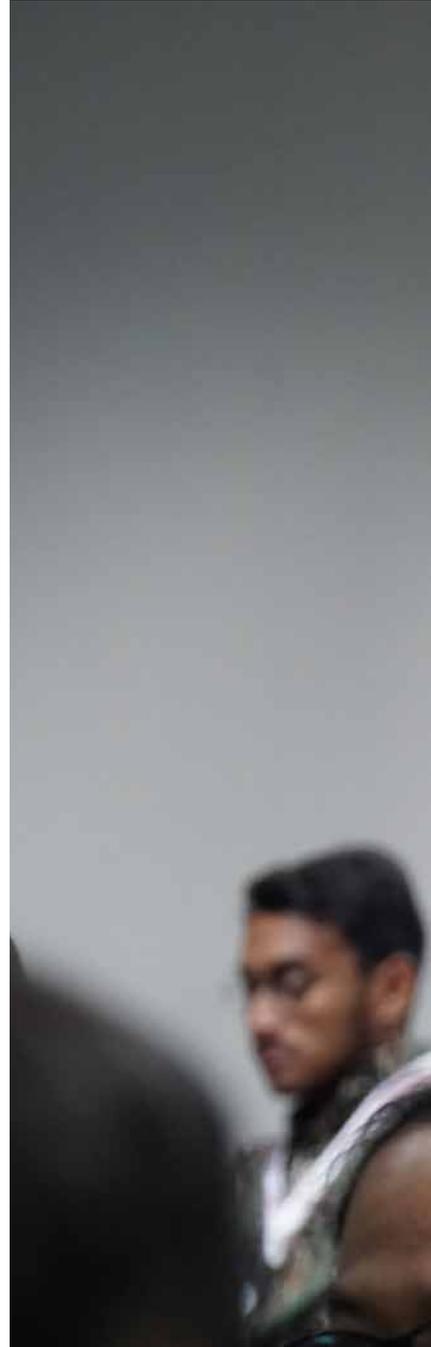
Internet connectivity and digital media have greatly assisted the Indonesian National Library in promoting the acceleration of literacy culture in various regions of Indonesia through the development of digital portals and internet-based library services. Continuing exposure from Dr. Joko Santoso, according to Dinita Andriani Putri, currently the implementation of the principle of digital inclusion in Indonesia still has many obstacles and challenges. As most internet connectivity and services are still concentrated in Java, the cost of internet access is relatively not affordable by most citizens. The challenges also occur in gender disparity and the limited agenda of empowering citizens to have the same opportunity in accessing the internet. Based on the research made by the Web Foundation's, the provision of universal access obligation (USO) in 2020 is likely to decrease.

Gender disparity is also a concern of Ivonne Kristiani from Wikimedia Indonesia. According to her presentation, the problem of gender disparity is reflected in internet content that is less representative of the views and voice of women. To tackle this challenge, Wikimedia



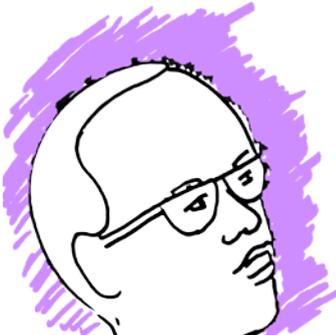
Indonesia collaborates with the Wikimedia networks around the world by holding a Wikigap project that aims to increase the amount of content about women. This initiative was carried out simultaneously in 50 countries in 2018, involving around 734 Wikimedia contributors who later produced around 27,000 articles about women leaders around the world.

The challenge of the digital divide is also still faced by people in rural areas. One approach that can be taken to overcome this gap is to develop local community networks and infrastructure. In 2016, Common Room started to develop a community-based internet network among the Kasepuhan Ciptagelar indigenous community together with ICT Watch and the Raspberry Indonesia community (Perintis). This initiative was then continued by building a local internet infrastructure supported by the Association for Progressive Communication (APC) and Awinet in 2019. Based on this experience, efforts to develop a community-based internet network that utilizes open source technology can be an important breakthrough to overcome challenges in the digital divide. In this particular context, the local community in rural areas are proven to be able to be involved in the empowerment process to increase internet connectivity with an autonomous and sustainable approach.





# DIGITAL LIB



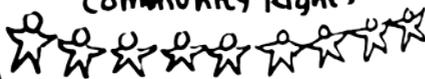
Dr. Joko Santoso  
Perpustakaan Nasional

## Challenge

- Connectivity DisParity

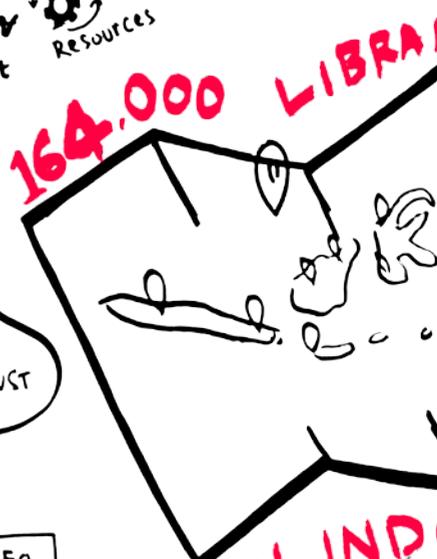
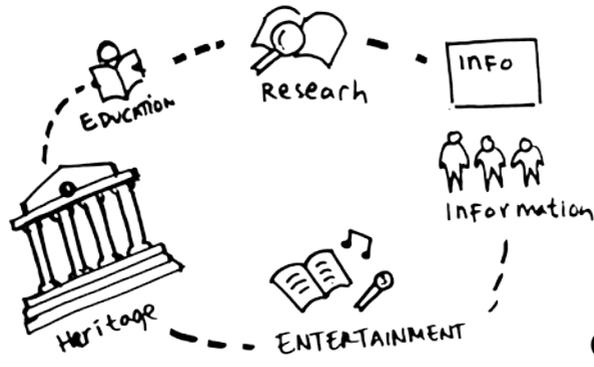


◦ Library Service as Inclusive Community Rights



◦ Regional Library is a MUST

## Function



## IN IND Strategy

- Sharing Space
- Skill & Vocat Training
- Con Le
- SP

PR  
PR

# LIBRARY & LITERACY

People with disabilities  
LOW VISITOR



- ① Literacy Strengthening
- ② Increasing Capabilities
- ③ Communities Reach Wellfare



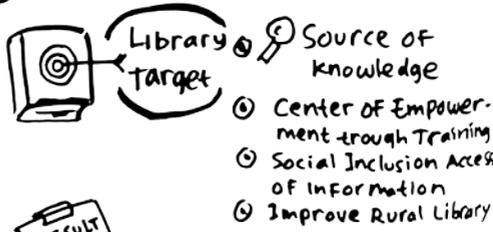
NO.2  
IN THE  
WORLD  
AFTER  
INDIA

## NATIONAL PRIORITY

- ① PRACTICAL & INCLUSIVE INFORMATION LITERACY
- ② Community Facilitation
- ③ Social Inclusion Service

RIES

ONESIA



- ☑ SME Marketing
- ☑ Access to Jobs
- ☑ Local Content Creation
- ☑ Better Living For people With dissability

Contextual learning space

ional



# DIGITAL IN THE JOURNEY AND



DINITA ANDRIANI PUTRI  
WEB FOUNDATION



3,8 BILLION  
INTERNET  
USER  
2 BILLION  
WEBSITE



4 BILLION  
NO ACCESS  
TO INTERNET



INDONESIA  
Target the Digital Energy  
OF ASIA

2015  
↓  
50  
Have A  
◦ ACC  
◦ AFF  
◦ Gen  
9  
MOBI  
USE

## WHY Indonesia Access Through Mobile ?

SURVEY IN 9 COUNTRIES



90% WOMEN USERS  
Social media

# CONCLUSION

## THE FUTURE OF INDONESIA



0%  
Access to Internet

ACCESS  
AFFORDABILITY

Digital Gap

9%  
LE  
R



1 GB = 2% Income / month  
Rp 100.000,-

BPS Rp 5 MILLION / month  
Really?

### WHAT Next?

#### Empowerment

1. Equal opportunities
  - Decision Making
2. More opportunities
  - More options
3. Support Diversity  
Unity Diversity
4. Tolerance  
Prevent & Reduce  
Bullying

- o Meaningful Connectivity
- o Awareness & Understanding  
on Personal Data Protection  
data Rights

ICT POLICIES With  
Gender sensitivity

Social economy

Class sensitivity

HERSTORY



IVONNE KRISTIANI  
WIKIMEDIA INDONESIA



27.000  
WOMEN

WRITE WOMEN HISTORY ON WIKIPEDIA



50 MI

WOMEN CONTRIBUTION ON INTERNET SHOULD BE HIGHLIGHTED  
GENDER INCLUSION!

# WIKIGAP

## THE ROLE IN WOMEN

IN THE



OH, ALL MEN'S HISTORY

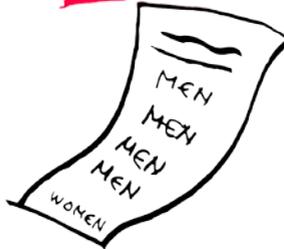
MORE RESEARCH



LACK OF RECORD ON WOMEN'S HISTORY



HEY, WHERE'S WOMEN

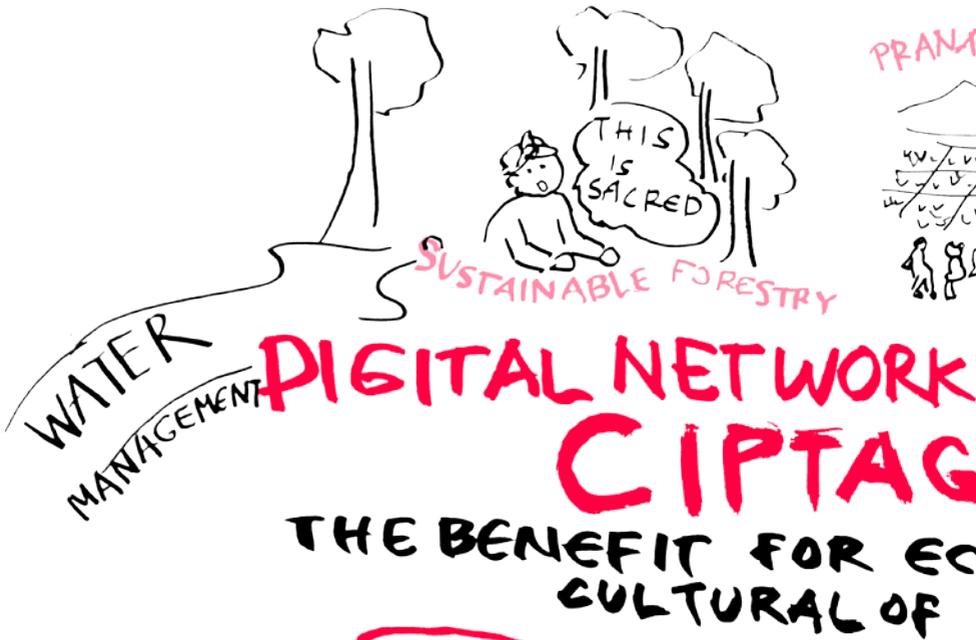


LACK OF WOMEN'S HISTORY



# WOMEN REPRESENTATION IN THE DIGITAL WORLD







# COMMUNITY IN SELAR

## ECONOMY, SOCIAL & INDIGENOUS COMMUNITIES



### RURAL STRATEG



# MYANMAR

## ASORCOM

ALTERNATIF SOLUTIONS  
FOR RURAL COMMUNITIES



PUM SUAN HANG

KNOW  
SHARE



GIRISH KUMAR



POWER BANK



DIM SUAN Hwai

USE LOCAL DIALECT

COMMUNITY NETWORK  
TOPOGRAPHY



LO  
RE

# INDIA



SANKETH KUNAR  
PATHIKONDA

A QUICK LOOK ON THE  
REAR-VIEW MIRROR

EDGE  
RING



Raspberry Pi

SHARE STORIES

MODEM EDUCATION

- BROKE OLD CLASS STRUCTURES ONLY TO CREATE NEW ONES
- PRO LITERACY
- PRO - ENGLISH

LOCAL  
CUISINE

ENABLING  
RURAL  
LIVELIHOODS

NEXT

LOCAL  
SOURCES



LOCALIZE  
CONTENT

HANDICRAFTS

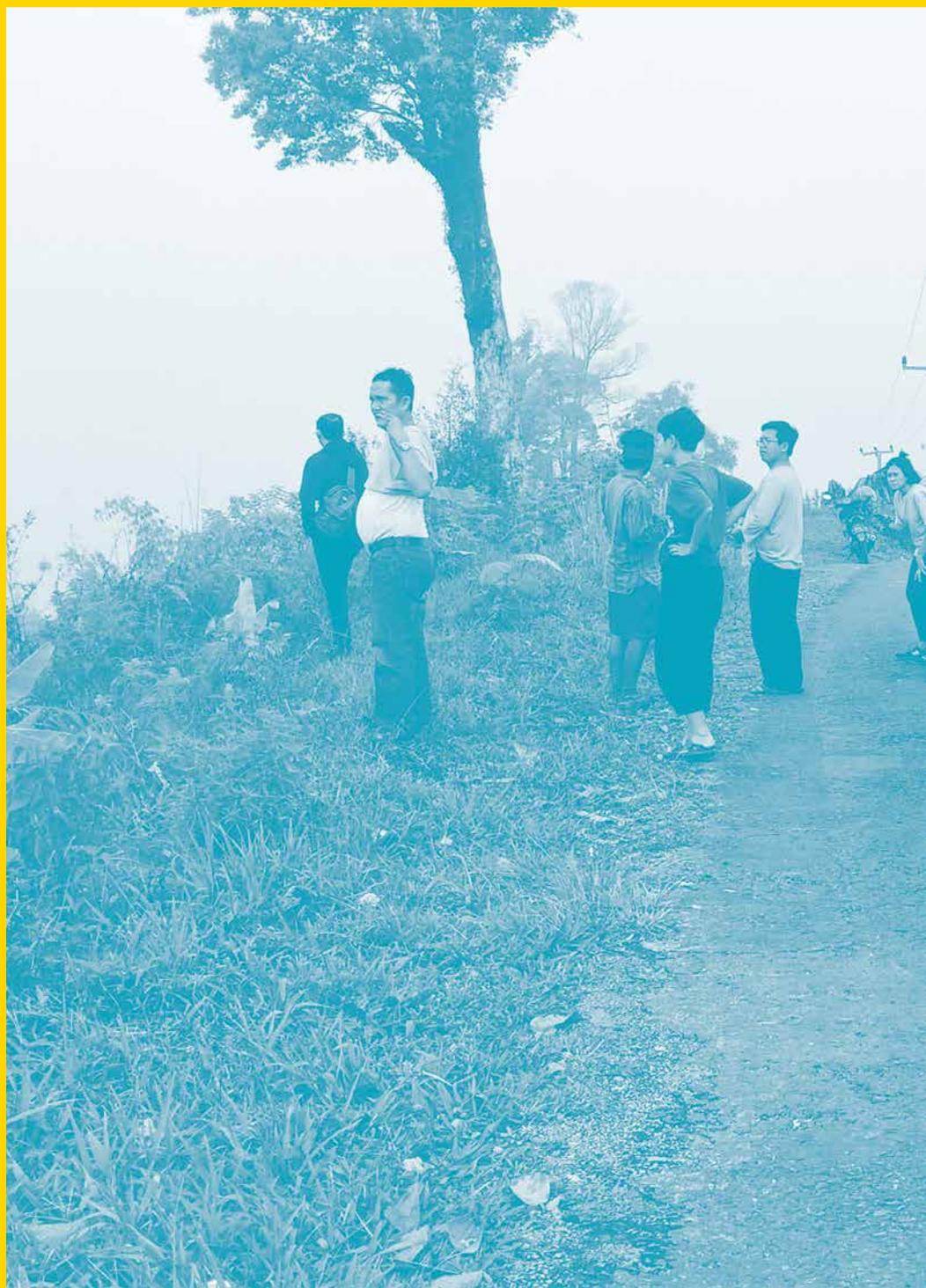
LOCAL  
HISTORY  
CULTURE

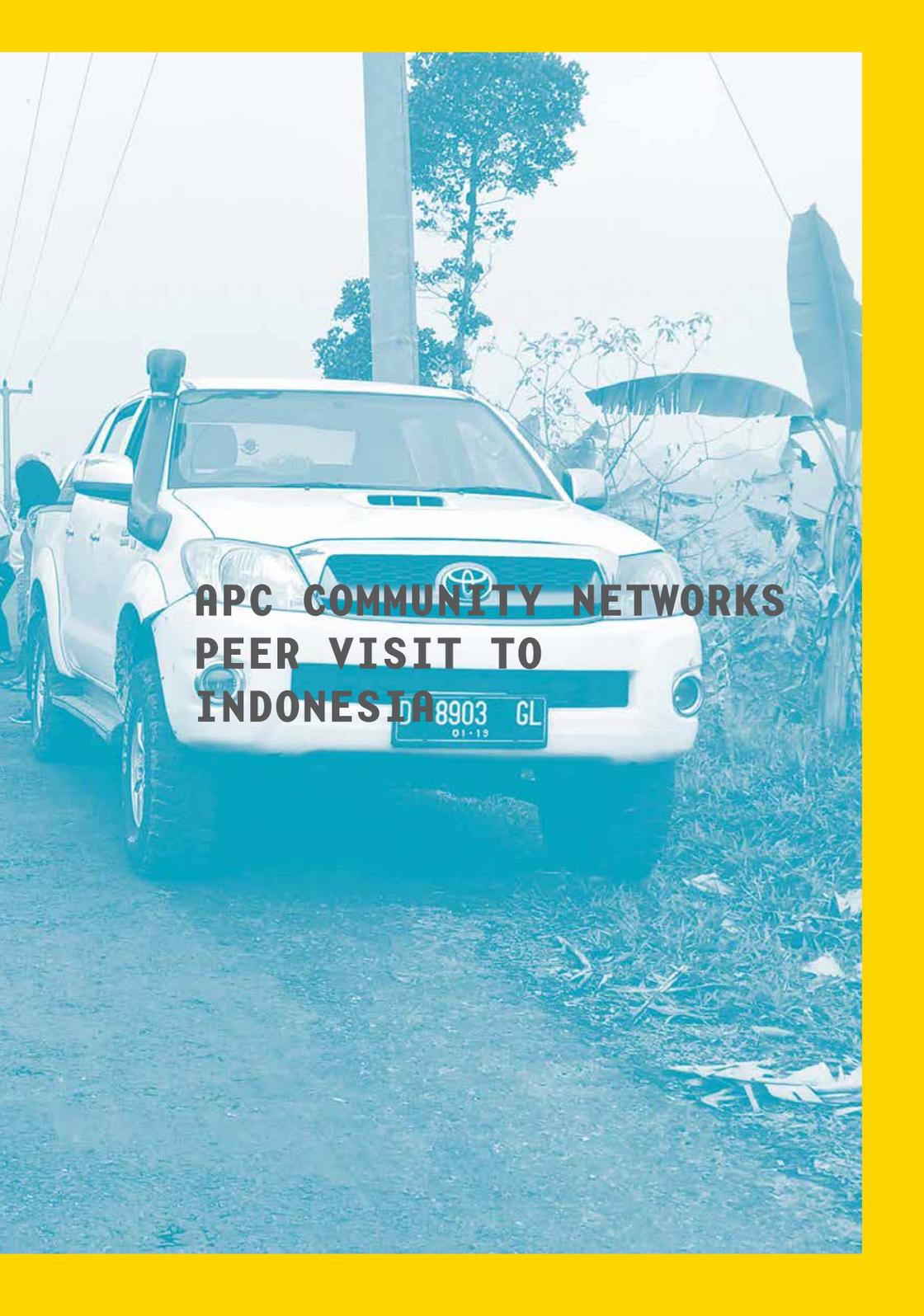


ENABLING  
LOCAL  
COMMUNITIES



CONNECTING  
COMMUNITIES





**APC COMMUNITY NETWORKS  
PEER VISIT TO  
INDONESIA**

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## APC COMMUNITY NETWORKS PEER VISIT TO INDONESIA

On 8th to 23rd of October 2019, some members of APC community networks visited Indonesia. This encounter was carried out by Michael Suantak and Mary Dim from ASARCOM - Myanmar, as well as Vendanthi Giri (Girish) and Sanketh Kumar from Janastu - India. Besides visiting Kasepuhan Ciptagelar Village where community-based internet network development activities were being implemented by Common Room, they were also involved in a multi-stakeholder meeting held at one of the sessions in the Indonesia Internet Governance Forum 2019 (ID-IGF) that is held at the BPPT Building Jakarta on the 9th of October 2019. During the meeting, Michael Suantak, Girish and Sanketh Kumar had the opportunity to give a brief presentation on the efforts to develop local internet infrastructure and the community networks initiative in Myanmar and India. After participating in the multi-stakeholder meeting in ID-IGF 2019 in Jakarta, they continue the APC peer visit to Kampung Kasepuhan Ciptagelar together with Common Room.





## Attending Ngaseuk Rituals

As they have arrived at the Kasepuhan Ciptagelar Village, Michael Suantak, Mary Dim, Girish, and Sanketh Kumar had the opportunity to take part in Ngaseuk rituals which were held in the early morning of 11th of October 2019. Ngaseuk is one of the important rituals and part of an ancestral farming tradition for the indigenous people of Kasepuhan Ciptagelar. This activity, which is held once a year, marks the dry paddy planting season in the swidden land (Huma) for all members of the local indigenous community in the region. Paddy planting activities are only done once a year by the indigenous community members of Kasepuhan Ciptagelar.

Apart from swidden farming or the dry paddy planting process that is known as ladang or huma, the indigenous people of Kasepuhan Ciptagelar also know the wet planting system in the paddy fields that are known as sawah. Paddy planting activities in huma and sawah are usually carried out in different ways even in the adjacent time span. Usually, Ngaseuk in huma is done first when compared to planting rice in the paddy field (Tandur).

To welcome the new planting season, there were some interesting traditional activities in Kasepuhan Ciptagelar village in early October 2019. As part of the preparation for the Ngaseuk rituals, some community members that are part of hunters family (Paninggaran) carried out deer hunting tradition from 7 - 9 October. This activity

was then followed by a mass praying rituals to welcome Ngaseuk on the night of October 10, and the Ngaseuk procession on the morning of October 11, 2019. This series of ritual activities was then complemented by a procession of Prah-prahan or Pajeg Sapar on October 12, which was then continued with another mass praying ritual to welcome the full moon ceremonies on the night of October 13, 2019.

This series of rituals and traditional ceremonies is a regular activity that is held annually by the indigenous community of Kasepuhan Ciptagelar every year. During the Ngaseuk procession, the ritual activities carried out at the ancestral swidden land (Huma Rurukan) are usually directly led by Abah Ugi as the chief leader of the Kasepuhan Ciptagelar indigenous community. In carrying out the rituals at the Huma Rurukan, the indigenous community members also accompanied the paddy planting ritual with cultural activities, especially the traditional bamboo music known as angklung buhun which is performing certain songs and dances. This artistic and cultural expression celebrates the paddy planting procession that is carried out together by the whole community members.

Ngaseuk is an ancestral tradition and cultural practice that is considered sacred and full of the learning process. Starting with the clearing and land preparation, mass praying to the ancestors and the



natural surroundings, respecting the paddy seeds to be planted, including the paddy planting process that is carried out by the indigenous community members. At the end of the Ngaseuk rituals, all community members usually rest and have lunch together by enjoying meals produced from rice seeds planted and harvested by the community themselves. This particular tradition somehow enhances togetherness and simplicity as a unique tradition and cultural expression, including spiritual practice, which functioned as common space which embraced the paddy planting process together with all indigenous community members that are involved in this unique ritual.









Attending Ngaseuk Rituals

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## Visiting Internet Tower in Ciptagelar & Burangrang Area

In addition to taking part in some ritual and tradition in the village, the APC peer visit also hold a discussion to exchange experience and knowledge in developing local internet infrastructure together with the Awinet team, who also accompanied them to visit Pangapungan BTS and Cigaronggong BTS, including several wireless internet spots that were installed in some houses of residents in around Burangrang and Kasepuhan Ciptagelar Village on the same day. On this occasion, Michael Suantak, Mary Dim, Girish, and Sanketh Kumar also had the opportunity

to meet and discuss directly with Abah Ugi as the chief leader of the Kasepuhan Ciptagelar indigenous community.





Visiting Internet Tower in Ciptagelar & Burangrang Area

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## Visiting Micro-hydro Turbine

Michael Suantak, Mary Dim, Girish, and Sanketh Kumar also visited the micro-hydro turbines located in Situ Murni Village on 13th of October 2019. This turbine is one of the four micro-hydro turbines which is the sources of electricity for the Kasepuhan Ciptagelar indigenous community. Michael Suantak and Mary Dim's visit ended as they have to come back to Myanmar on the 14th of October 2019.





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## Raspberry Pi Radio Workshop by Janastu

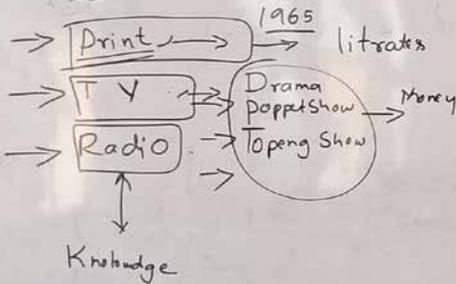
Meanwhile, Girish and Sanketh continued the peer visit activity and facilitated the internet radio workshop with students at SMP 4 Cislok Satu Atap (state-run middle school), which took place from 14 to 19 October 2019. On this occasion, Girish became the workshop facilitator that is accompanied by Umi Kusumawati, local residents in Kasepuhan Ciptagelar village. Along with it, Sanketh is working in collaboration with Abah Ugi, as well as with Numan Sumantri (Kang Nunu) and Kang Hasan from Awinet to develop a prototype of local radio server using a Raspberry Pi.

At the end of the visit, Girish and Sanketh made time to visit the Common Room in Bandung on 21st of October 2019 before returning back to India on the 23rd of October 2019.





14-10-2019

Mass Media

for information

RADIO WORK  
FOR CHILDRENPelatihan Radio untukRadioWhen — it was grandmother how  
it was long ago.How — 1 person accidently invented  
Radio Receiver.Why.

# Workshop of SMPN 4 Cisolok

for anak-anak SMPN 4 Cisolok.

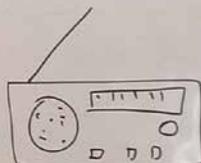
## What is Radio

technology for information

The device which produces radio waves is called Listening media

Radio waves

Radio waves



Radio Programs

Antenna ~~is~~ Black colour.

music

News advertising

Story, Comedy.





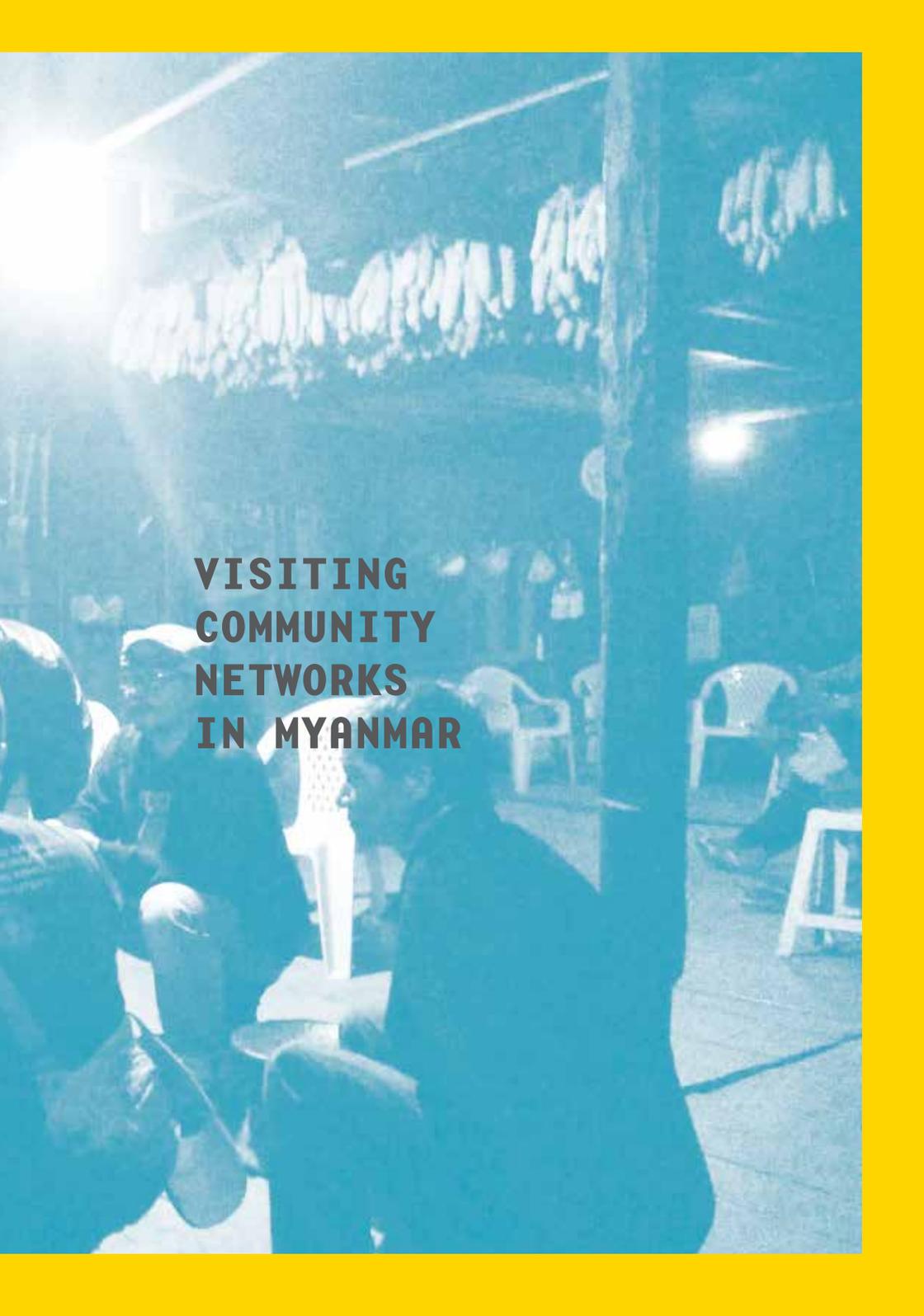












**VISITING  
COMMUNITY  
NETWORKS  
IN MYANMAR**

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## VISITING COMMUNITY NETWORKS IN MYANMAR

One of the activities that are part of the Community Networks Learning Grants (CNLG) program supported by APC is a peer visit to certain places where community networks initiatives are developed by local residents in respective countries. The main purpose of this activity is to support the efforts to develop community networks projects between various communities in the region, as well to provide some opportunities for a mutual learning experience in developing local community-based internet networks and infrastructure.

As part of the CNLG project activities, I had the opportunity to visit Myanmar from 1st to 7th of November 2019. During my stay in Myanmar, most of the peer visit activities are carried out in the Chin State, where the community networks project is developed by Alternative Solutions for Rural Development (ASORCOM) in Thuklai and Valvum villages. These two villages are located in a remote mountain environment. Most of the residents work as traditional farmers who have a unique local culture and identity.

To reach Thuklai and Valvum village, the trip is carried out using a commercial aeroplane from Yangon to Kalemmyo in northern Myanmar region. The flight took about 2 hours, before proceeding by car to the Thuklai village with a travel time of about 3 hours. Michael Suantak from ASORCOM accompanied the visit. Along the way from Kalemmyo Airport to Thuklai Village, we can see views of the winding and beautiful mountainous region. In this village, ASORCOM built a backhaul tower to provide internet connectivity that utilizes hydroelectric power source which has just been renovated by residents who work together with the local government.

We stay at the Savory Center which is managed by Michael Suantak and Mary Dim from ASORCOM. Some young people from Thuklai Village learn to utilize and develop internet networks in this place. When we just arrived, I had given the opportunity to share some information and experiences in developing community networks projects in Kasepuhan Ciptagelar village. Furthermore, I also had the opportunity to give a presentation and discussion in Thuklai Baptist Church on 3rd of November 2019. After having some discussion with local residents, the activity continued with a visit to an organic farm managed by local residents named Dong Kok and a small beekeeping activity that is



managed by Mr. Pa Cin.

The peer visit activity then continued to Valvum village, which is about 60 km away from Thuklai. The journey to the Valvum village takes about 3 hours, crossing the steep and winding mountain slopes. To develop a community-based internet network and infrastructure in this village, ASORCOM is collaborating with a community of farmers who grow coffee and oranges in the region. In the evening after arriving in this village, we also had the opportunity to share experiences in developing community-based internet networks with local residents at the Valvum Assembly of God Church.

On Sunday, 4th of November 2019, the peer visit in Valvum village is continued to the

location of the coffee and orange plantation that is managed by some local residents. Following these activities, we also visit the backhaul tower that was being built at the top of Prayer Mountain which is not too far from the village. Later on, this tower will be functioned to open internet connectivity that can be utilized by local residents, especially for coffee and orange farmers in Valvum village area. After touring around Valvum village, the visit continued to Tedim town to see Siang Son model village which has an example of unique Chin traditional architecture.

We returned to Thuklai village and spent the night there. At around 19:00 in the evening, we had the opportunity to record an interview on Haisa FM Radio. This radio station is managed by local residents

in Thuklai village. On this occasion, we talked about experiences in developing community-based internet networks and infrastructure in the Kasepuhan Ciptagelar area. We also exchanged some reflections on local culture and tradition with Pa Cin, one of the elders in Thuklai village. According to him, there are many unique cultures and traditions of the Chin tribe around Thuklai village. For him, the internet and digital media can help to explore and reintroduce local culture and tradition to the younger generation.

We talked until late at the Haisa FM Radio studio. After the recording session was over, we returned to the Savory Center to rest. On Monday, 5th of November 2019, Michael Suantak drove me back to the Kalembo Airport. We briefly stopped at his

family's house, which is also a place for Chin Hill coffee production which he managed together with farmers in Valvum village. I bought several packs of coffee before continuing my trip and rested for 1 day in Yangon, where I had a chance to visit 360ed, a social enterprise that engaged in the development of digital education media in Myanmar. The company is led by a young woman entrepreneur named Hla Hla Win. We know each other at the South-south Media Lab encounters back in 2018. Finding young figures like Michael Suantak and Hla Hla Win in Myanmar made this visit very inspiring.

More info about ASORCOM can be accessed through the following URL: <http://asorcom.net/>



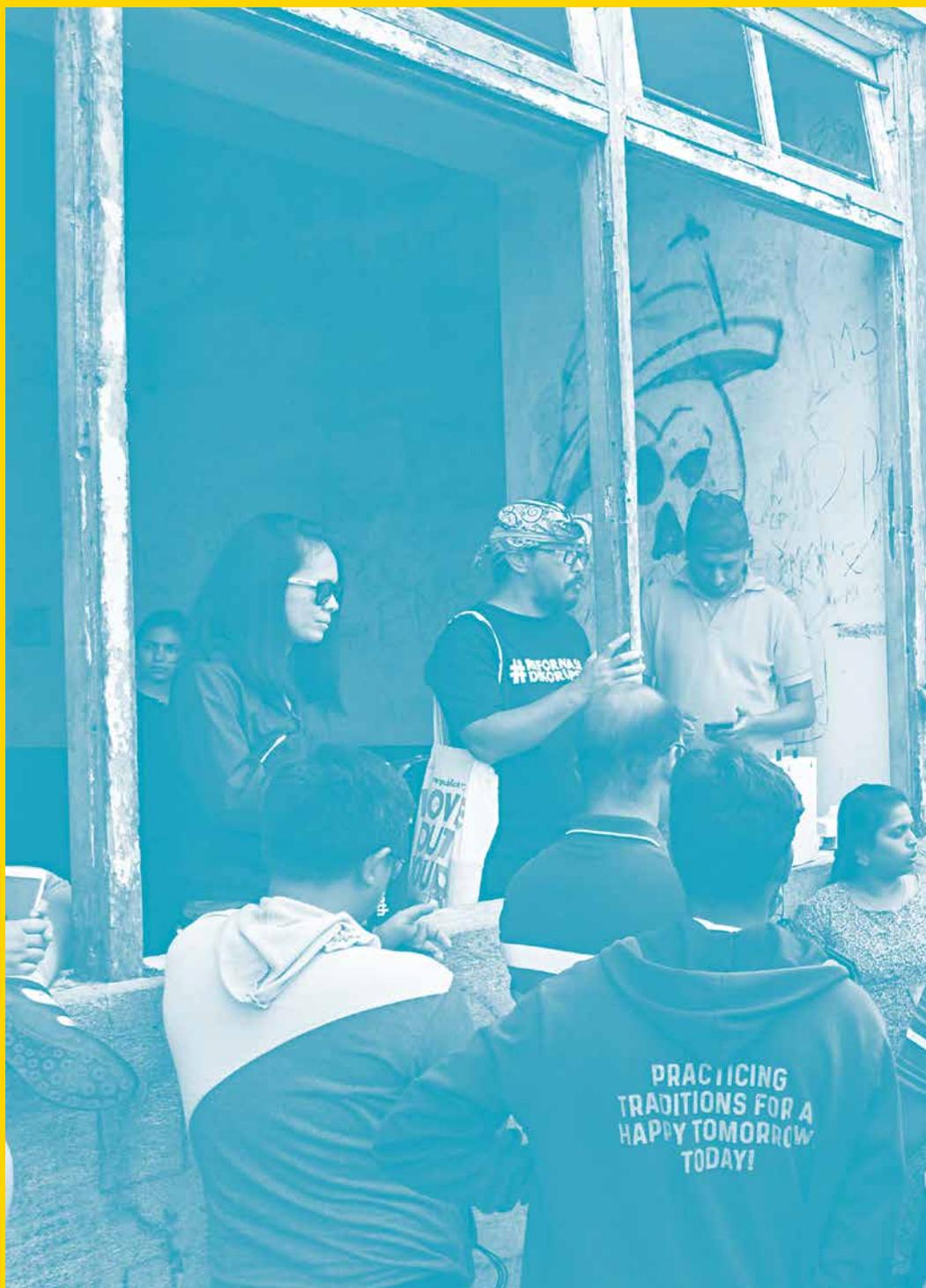












A photograph of a group of people outdoors, many holding up smartphones to take pictures. The scene is set against a background of trees and a stone wall. The image is overlaid with a semi-transparent blue filter. The text 'CNLG PEER VISIT TO INDIA' is centered in the middle of the image.

**CNLG  
PEER VISIT  
TO INDIA**

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## Visiting Community Networks in Pathardi Village

Common Room was having the opportunity to visit the location of the community networks project developed by Gram Marg in Pathardi village, located in the Jawhar region, Maharashtra, India from 7th to 10th of December 2019. Gram Marg is a research institute that explores the utilization of TV white space spectrum to provide affordable internet connectivity in rural India. For the community networks development in Pathardi region, Gram Marg collaborates with BAIF Development Research Foundation, a research and rural empowerment institute that is based in Pune.

In this peer visit activity, Common Room is included Gustaff H. Iskandar, Reina Wulansari and Talitha Yurdhika. Meanwhile, the visit to the Pathardi area was facilitated directly by Sarbani Banerjee and Ramprasad, which was also accompanied by some other colleagues from BAIF Development Research Foundation. The local community-based internet infrastructure project is one of the important features for rural community empowerment activities in the region. This collaborative effort is part of the Community Networks Learning Grant (CNLG) project that is supported by the Association for Progressive Communications (APC).

An internet-based community radio prototype was also developed to produce and collect local content related to the

daily lives of people in Pathardi village using Raspberry Pi. To promote various agricultural products, as well as the richness of local culture and tradition in the region, Gram Marg has also developed a digital portal aimed to gather information while promoting some local products made in small villages and hamlets around the Pathardi region. In addition to visiting the internet infrastructure managed by the local community, this activity was also accompanied by some encounters to Warli painting artist in Pathardi village and traditional mask craftsmen in the Sahyadri hamlet.

During this visit, we also took the time to take part in hiking activities to the Dabhosa waterfall, including a visit to the community seed bank in Dabhosa hamlet which is managed by Mr Sunil's family. We also got invited to attend the tribal folk dance under the moonlight at Wanganpadi hamlet. The series of peer visit activities were also included discussions about the activities of BAIF Development Research Foundation and the visit to the seed bank in Jawhar. In between these activities, we also able to see the activities of jasmine flower picker in the Shiroshi hamlet, as well as observing mixed cropping farm site that is managed by Mr Lahan's family that is located in the same region.

The collaboration between Gram Marg and BAIF Development Research Foundation in the Pathardi region have been







continuously aimed to empower the people in rural areas, who are mostly consisted of smallholder farmers. In addition to developing local community-based internet infrastructure, the collaboration of these two institutions also encourages

the initiatives to produce local content related to agriculture, biodiversity map and resources, as well as identifying the richness of arts, culture and traditions in the local region. In this particular context, internet connectivity and digital media utilization is an enabler instrument and inseparable tools that are important for the collective efforts to support inclusive and sustainable development process.



More info about Gram Marg and BAIF Development Research Foundation can be accessed through the following URL:

- <http://grammarg.in/>
- <https://baif.org.in/>



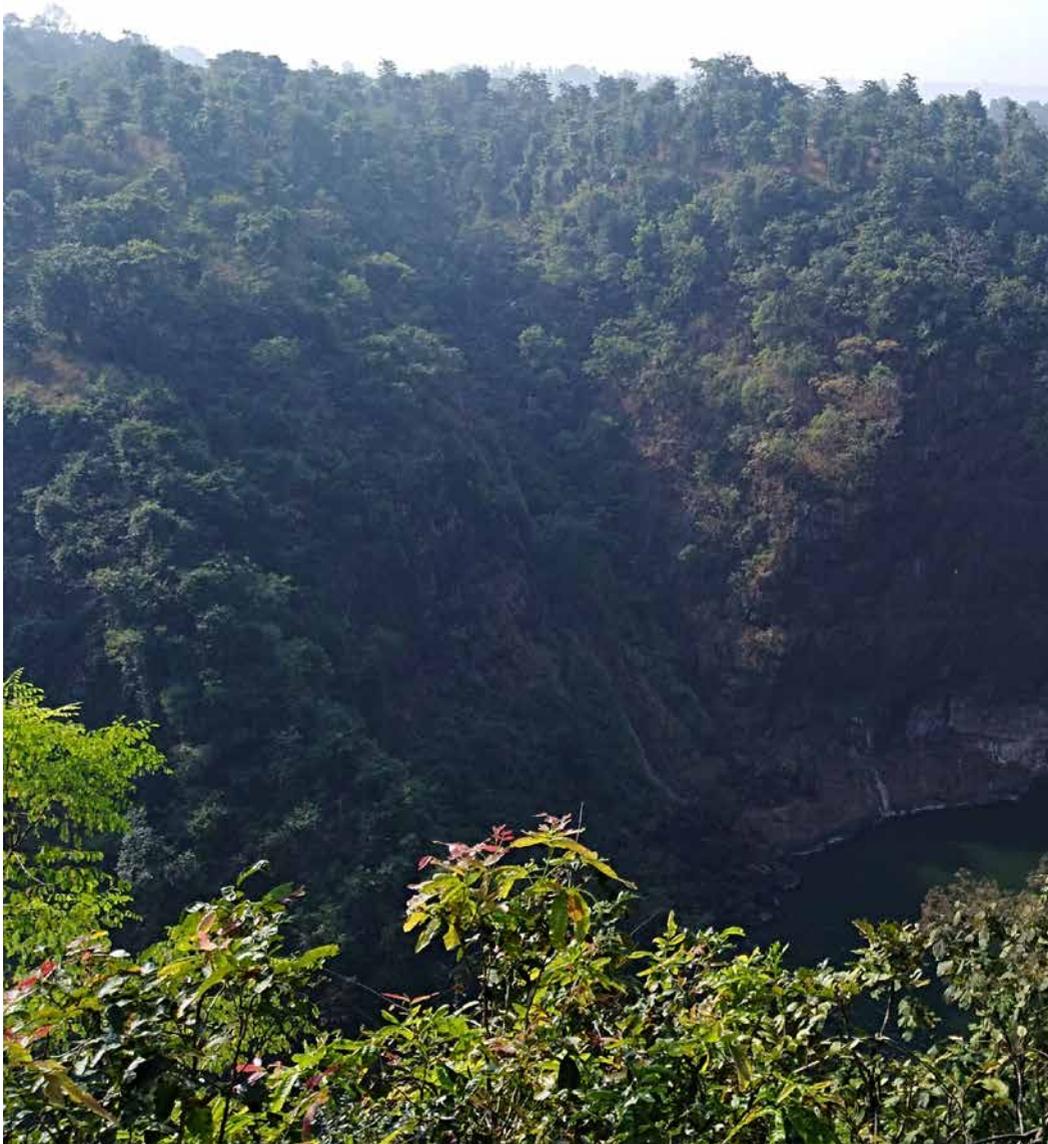














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## Taking Part in Anthillhacks 2019

After visiting the Pathardi Village in Jawhar, Maharashtra, the peer visit activity continues to the Devarayanadurga Hills which is located around 70 km from the city of Bangalore. We participated in the Anthillhacks 2019 that was organized by the Janastu, which engage with a community networks project development in the region. The main activity took place in a guesthouse located on the ruins of the old fort which was built around the 17th-century that once also known as the capital for Tumkur region. For several days, Anthillhacks 2019 brought together various communities, institutions and individuals consisting of artists, programmers, hackers, environmental activists and citizens from different countries and various backgrounds.

Various activities that were held during the Anthillhacks 2019 include workshops, discussions, presentations, hiking, and musical performances. Some of the activities are workshops on fruit and vegetable fermentation, as well as making dyes from natural plants. One of the interesting presentations is the Pattachitra show by Probir Chitrakar. Pattachitra is a form of oral culture and tradition that is conveyed through traditional paintings that flourished in the rural areas of West Bengal, India. In addition to that, there is also a traditional folk music performance by Shilpa Mudbi and Adithya Kothakota who are developing an urban folk project in Karnataka, India.

During the Anthillhacks 2019, some representatives from the Association for Progressive Communication (APC) host several discussions, workshops and presentations. This include a discussion on the internet and gender equality facilitated by Cynthia El Khoury (GenderIT.org), presentations and workshops on Libre Router for the development of local community-based internet infrastructure by Nicolás Pace (AlterMundi, Argentina), and the deployment of Raspberry Pi for community radio platform by Shalini A. (Janastu, India). This series of Anthillhacks 2019 activities is also part of the Community Networks Exchange (CNX 2019) that is held simultaneously by the Digital Empowerment Foundation (DEF) in Protovillage, which is located in the Andhra Pradesh region.

One of the highlight activities of the Anthillhacks 2019 is the full moon gathering at IruWay, an agricultural complex located at the foot of the Devarayanadurga Hills. This place is jointly managed by Janastu that develops organic farming and training facilities. Apart from that, there is also a traditional crafts production house and community radio which is managed together with local residents. Before attending the full moon night celebrations in IruWay, some participants also involves in the Libre Router installation workshop at the house of local residents in Durgadahalli village after taking part in hiking activities and exploring the Halekote route around



the old fort area in Devarayanadurga Hills. The hiking activities are guided directly by TB Dinesh (Janastu) who shares various aspects of historical narratives in this particular place.

The meeting in Anthillhacks 2019 has been successful in bringing together various activities related to the community networks development for civic empowerment in rural areas. In this particular event, the utilization of internet technology and digital media becomes an important instrument to support meaningful communication, as well to enable the knowledge production and distribution on artistic and cultural expression, including a shared narrative on placemaking process and collective intelligence. Anthillhacks 2019 is an

inspiring shared space that supports the dissemination of ideas around the technology utilization for civic empowerment, which also advocates access to information and knowledge to encourage mutual learning process, as well to develop the foundation for a cohesive and open platform for collaboration and innovation.

More info about Anthillhacks 2019 can be accessed through the following URL: <https://anthillhacks.in/>













## Continuing CNX 2019 in ProtoVillage

After being held together with the Anthillhack 2019, Community Networks Exchange (CNX 2019) activities are continued to ProtoVillage that is located in the Andhra Pradesh region. We took a trip around 3 hours away by car from the Devarayanadurga Hills to reach this village. ProtoVillage is a model village for cohesive and resilient ecological village. This place is also being developed as a space for learning, practice, as well as the dissemination of knowledge, in particular for the collective effort in empowering the people living in rural areas.

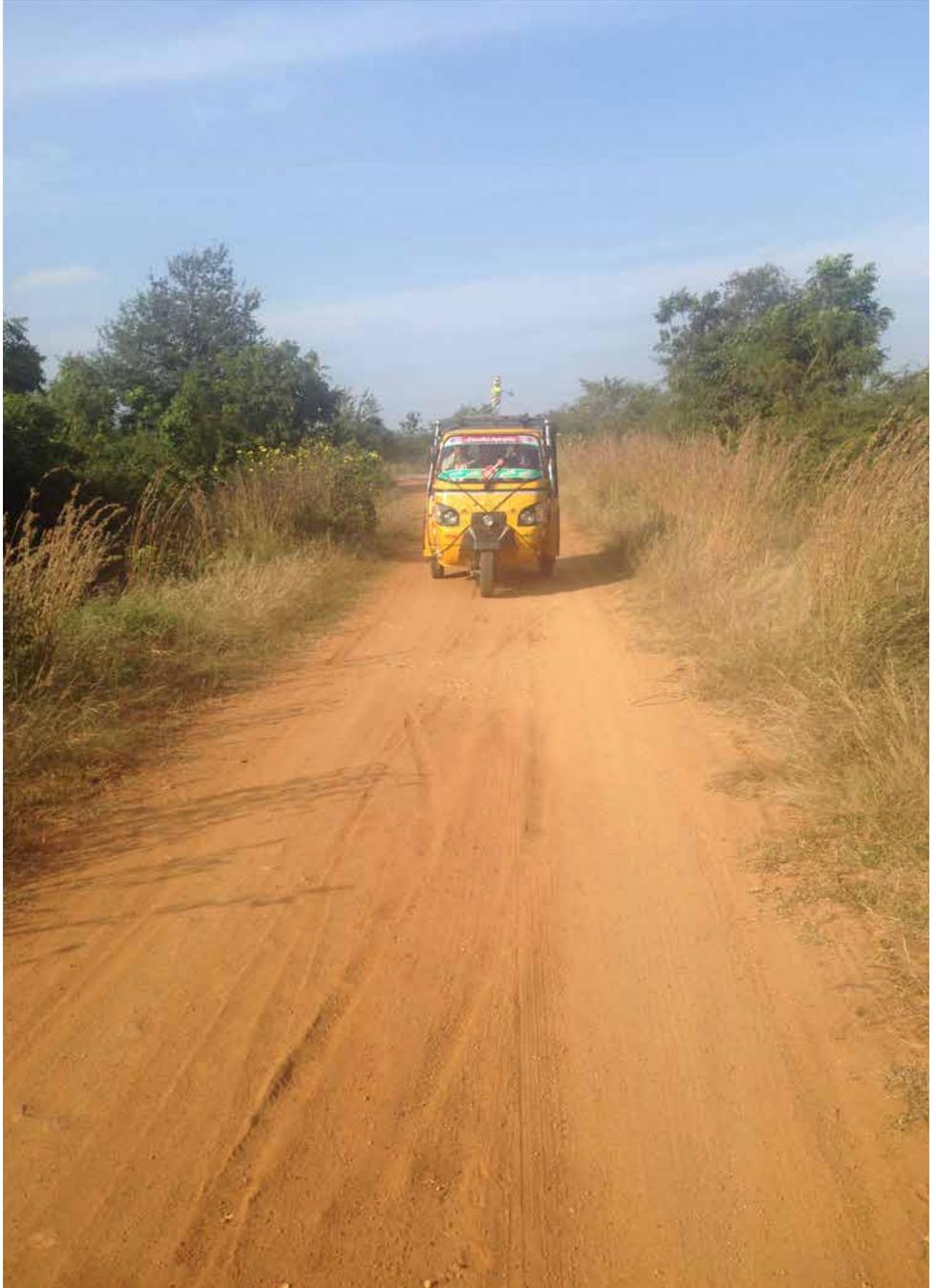
The series of CNX 2019 activities at ProtoVillage begins with a visit to facilities developed in this place, from the organic vegetable processing room, small production facilities for beauty products from natural ingredients, as well as recycling workshops that are managed by local residents. Some of the products can be bought and consumed by visitors who come to this area. The CNX 2019 activities then continued with a discussion and presentation session focused on sharing experiences and knowledge in developing community networks initiatives by the participants. This activity takes place from the 13th to the 15th of December 2019.

In this particular session, the participants were given the opportunity to compare and exchange experiences, as well to formulate some conclusions and reflecting further development of community networks

together. The participants were also invited to take part in a discussion session that explored collaboration between community networks organizer with the community radio practitioners. For this session, the engagement is planned to utilize the infrastructure that is run by community radio practitioners in order to develop community networks in rural areas.

In general sense, there is a common interest among the participants to produce and disseminate information about local knowledge in the respective region. In addition to that, most participants also share a similar view on the importance of involving the community to produce and disseminates information that is relevant to the needs of local citizens. In this particular context, cooperation and collaboration among the community networks facilitator with community radio practitioner can complement the reciprocal relationship that is able to support collective effort to provide affordable and reliable internet connectivity, which in the end can be utilized by the wider community.

Continuing the discussion and presentation sessions, Kriti Singh from the Digital Empowerment Foundation (DEF) discussed the importance of utilizing internet connectivity to access information in a healthy, safe, and accountable way. This is related to the amount of harmful content, including hoax news and hate speech that is spread through the internet and digital







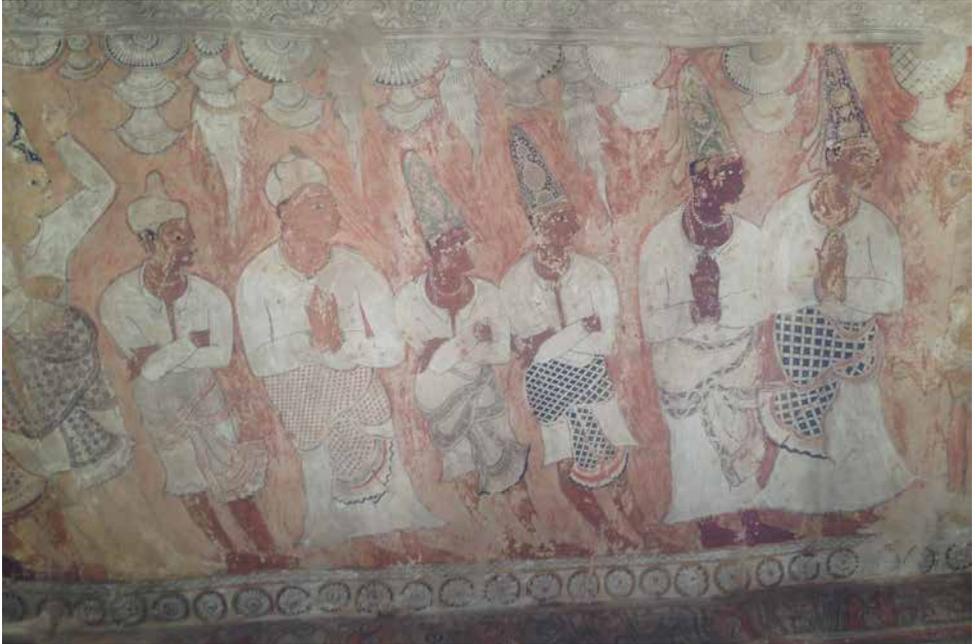


media platforms. On this occasion, Osama Manzar of DEF also amplifies cooperation and collaboration between community networks organizer and community radio practitioner is needed to open up more opportunities to access affordable and reliable internet connectivity for people living in rural areas, including to develop new awareness.

In his view, Osama Manzar also conveys the collective effort to provide internet connectivity has to be supplemented by the effort to develop critical awareness among citizens so that the internet can be utilized as meaningful communication tools and empowering mediums. At the end of the series of presentations and discussions, Nicolás Pace invited the participants to be involved in developing a wiki about internet

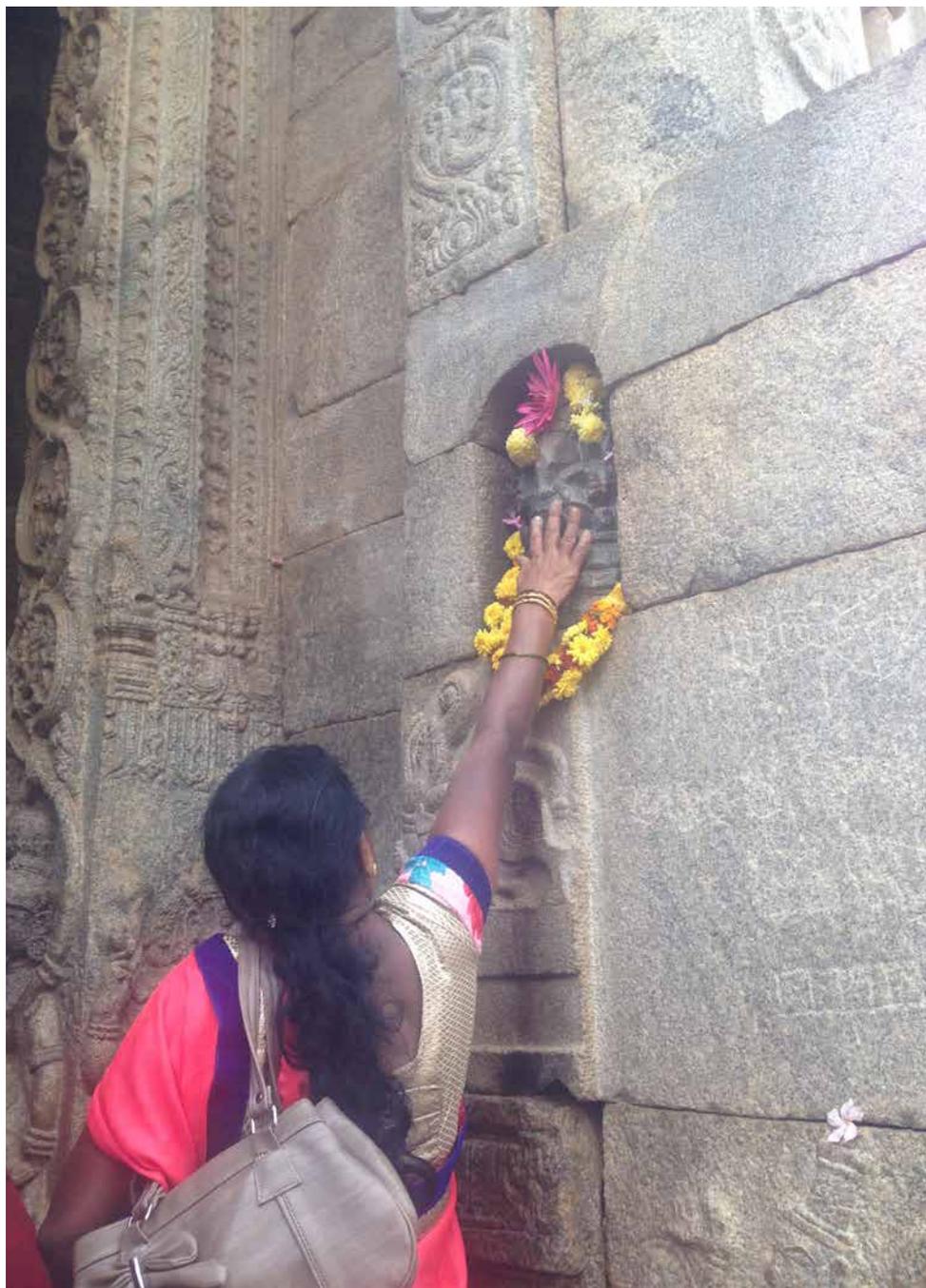
policy and governance in each country through the <https://wiki.opentelecomdata.org/>. This wiki is specifically developed as a platform for information and knowledge exchange about internet governance policies in various countries as well as a tool for learning, in particular to policy advocacy that can support the efforts to provide inclusive internet access that can be utilized by the people in general.

CNX 2019 activities were continued with a reflection and evaluation session from the participants. After running for three years since 2017, there has been a growing necessity to formulate a common principle that can be utilized to facilitate further development of community networks initiatives in many regions. In addition to that, shared values and strategy is also



needed to be reflected so that the CNX can continue to be held as a meeting, exchange and learning space for the development of community networks that are open for everyone. In the closing session, all participants were also invited to propose some ideas for the CNX in the coming years in order to maintain the collective efforts in developing various practices, strategies and policies that are able to develop an inclusive, healthy and sustainable community networks initiative.

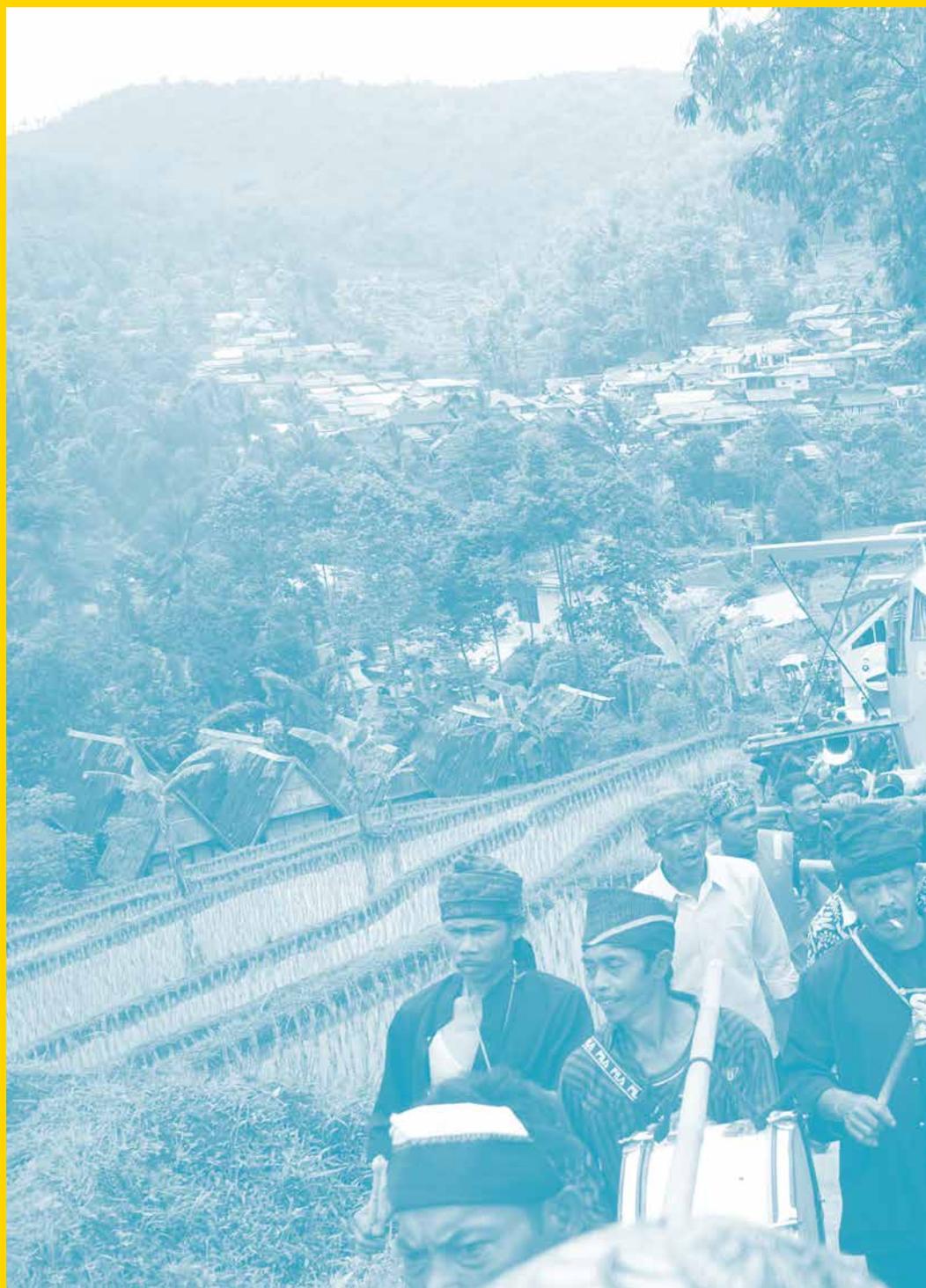
More info about CNX can be accessed through the following URL:  
<http://cnxapac.org/>

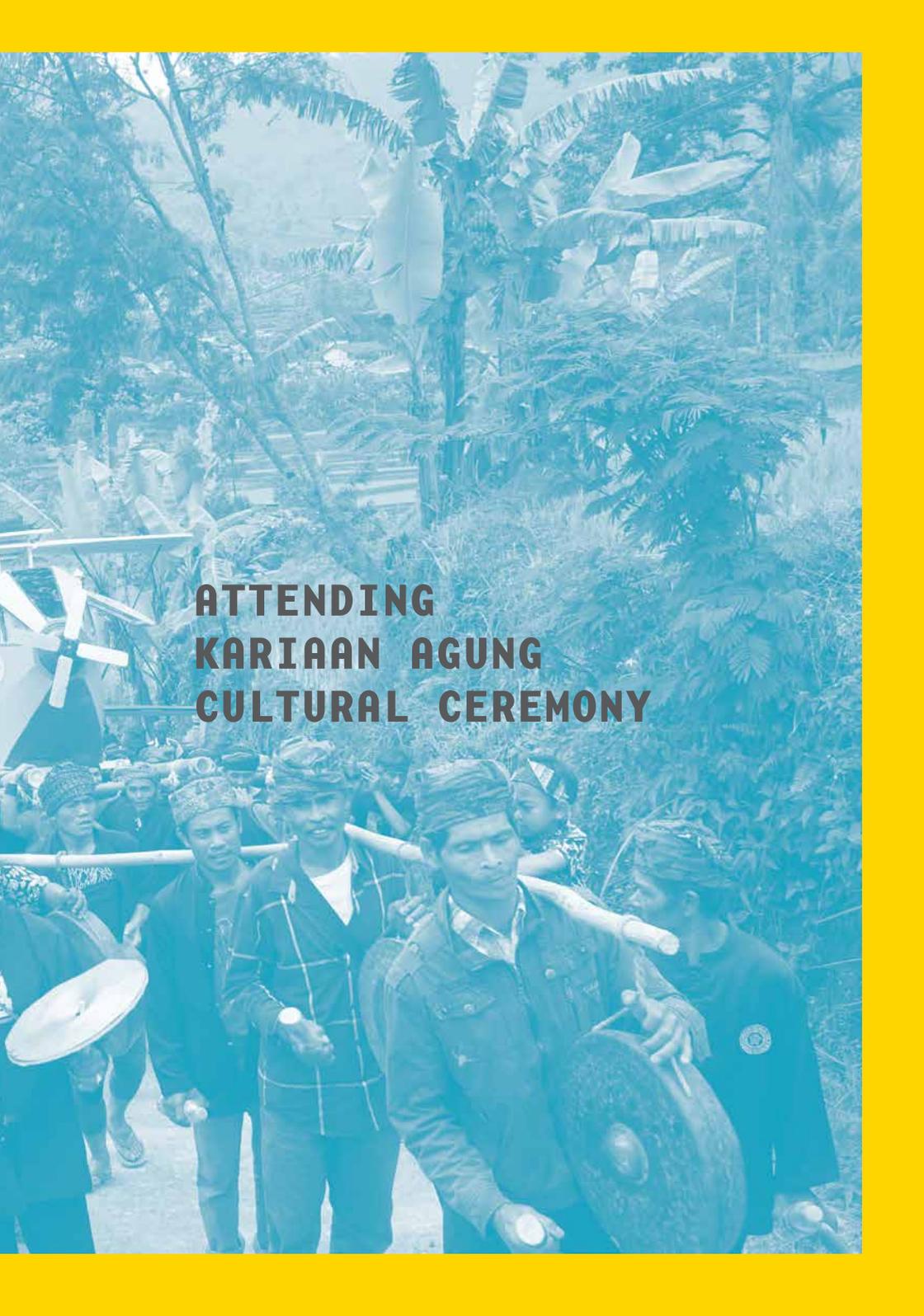












**ATTENDING  
KARIAAN AGUNG  
CULTURAL CEREMONY**

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## ATTENDING KARIAAN AGUNG CULTURAL CEREMONY

Kariaan Agung is a cultural celebration for circumcision ceremony of (Aden) Atlan Darmarasa, the first son of Abah Ugi, the chief leader of Kasepuhan Ciptagelar indigenous community. This event is taking place at Kasepuhan Ciptagelar village from 13th until 15th of December 2019. Apart from the cultural ritual and blessing ceremony, this particular celebration also consists of carnival, music concert, as well as other traditional art show and performances.



















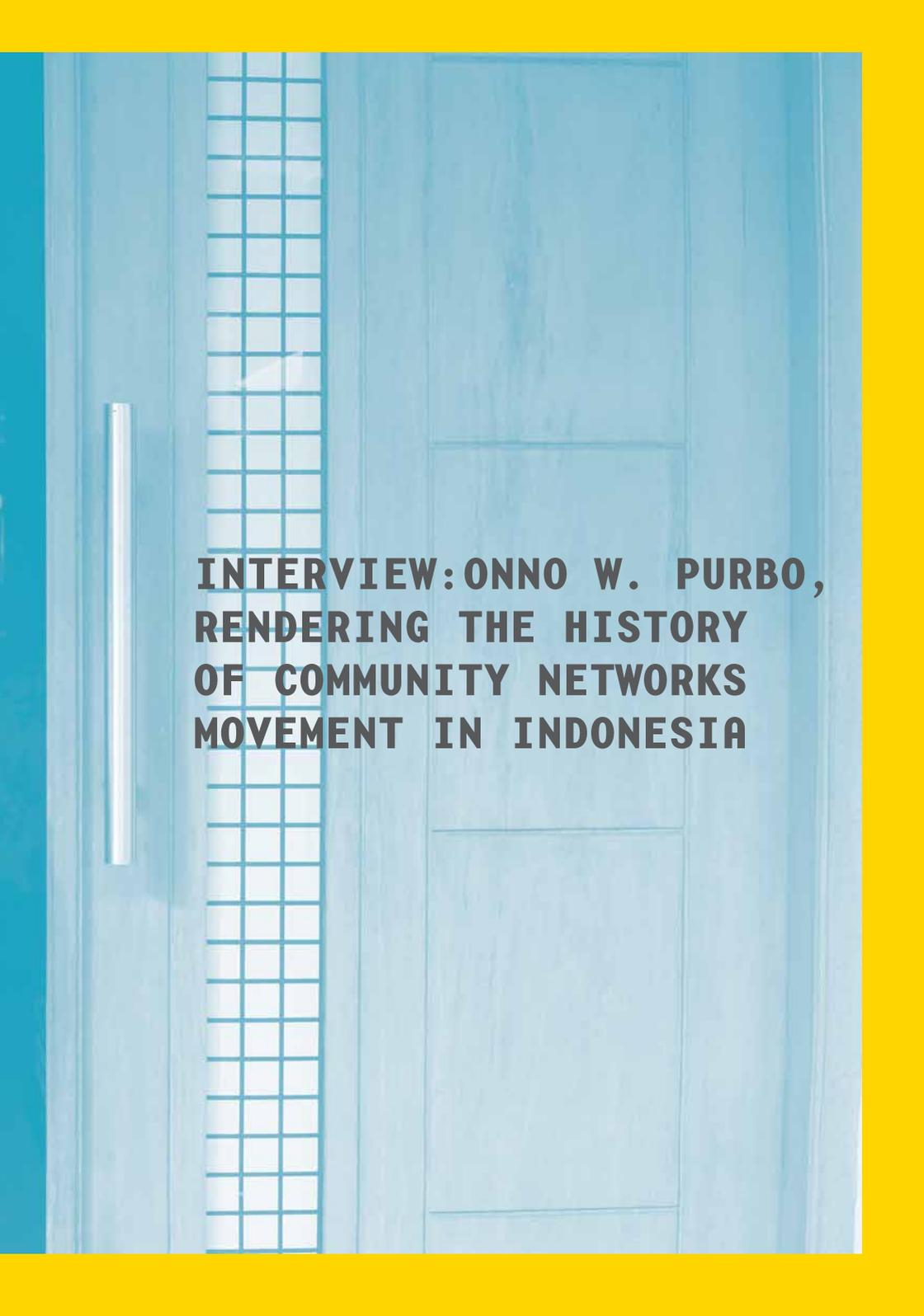






A photograph of a middle-aged man with short hair and glasses, smiling warmly. He is wearing a white t-shirt with the words "three second" printed in a black, cursive font across the chest. His hands are clasped in front of him. He stands in a doorway, with a dark interior behind him and a light-colored wall to the left. The entire image is framed by a bright yellow border.

*three second*

A blue door with a silver handle and a grid-patterned window. The door is set against a yellow background. The text is centered on the door.

**INTERVIEW: ONNO W. PURBO,  
RENDERING THE HISTORY  
OF COMMUNITY NETWORKS  
MOVEMENT IN INDONESIA**

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## **INTERVIEW: ONNO W. PURBO, RENDERING THE HISTORY OF COMMUNITY NETWORKS MOVEMENT IN INDONESIA**

Early development of internet technology and wireless infrastructure in Indonesia began to appear in the around the 1990s through the series of experiments by numerous groups of individuals in several campuses and communities. One of the pioneers was the Amateur Radio Club (ARC) community at the campus of Bandung Institute of Technology (ITB), which explored packet radio technology to develop wireless connectivity in order to deliver digital data and information through radio waves in the year 1986. At that time, Onno W. Purbo was still a student and actively engage with the exploration of packet radio technology that later on is being integrated to the development of Transmission Control Protocol and Internet Protocol (TCP/IP), with the guidance from some of their mentor including Robby Soebiakto and Achmad Zaini.

This TCP/IP framework was later also being adopted by several universities and research institutions such as ITB, University of Indonesia (UI), including the Agency for the Research and Application of Technology (BPPT) and the National Aeronautics and Space Institute (LAPAN) which then became the predecessor to the establishment of the PaguyubanNet, which known as the pioneer of community networks initiatives that was active in the year 1992 until 1994. This marks an important shift in internet development and triggers further development in community networks movement in Indonesia. To uncover these historical encounters, Common Room had the opportunity to interview Onno W. Purbo and discuss the development of community networks movement in Indonesia on 28th November 2019. In addition to that, this interview also discussed several aspects of internet policy and regulation, in addition to the dynamics that occur in its development.

According to Onno W. Purbo, the main interest to explore packet radio technology as the medium for wireless telecommunications and digital data transmission initially started with the necessity to develop reliable and affordable telecommunications infrastructure in Indonesia. In the early 1990s, the technology to deliver digital data was still fairly expensive and limited to a certain group of people and institutions. Besides the telephone and fax machine, at that time certain parties had also used the Bulletin Board System (BBS) as telecommunications and data transmission devices. Robby Soebiakto is known as one of the pioneers among amateur radio practitioners because he succeeded in connecting

several BBS servers in amateur radio networks around the world to send emails in 1986-1987.

During this period, the attempt to develop wireless connectivity that is using packet radio technology among ARC members were explored by using HF SSB SSB Transceiver radio set that is owned by Harya Sudirapratama with Onno W. Purbo's Apple II computer. At that time, some written information and publication about the experiment to deploy wireless internet connectivity in Indonesia began to appear in some printed media, in addition to journals and magazines that are run by some student organization such as the Electron Magazine that was managed by the ITB Electrical Engineering Student Association in 1989. One of the widely inspiring articles is entitled "Low-Cost Computer Networks Using Radios", which is written by Onno W. Purbo. This article was published in the Kompas newspaper in November 1990, when Onno W. Purbo was still a student at the University of Waterloo, Canada.

Furthermore, Onno W. Purbo said that at that time ITB was selected to be part of the Asia Internet Interconnection Initiatives (AI3). This research initiative provides high-speed internet connectivity by utilizing VSAT equipment which was connected to the Japan Communication Satellite (JCSAT) in September 1996. By deploying packet radio technology, the AI3 network that

was coordinated and facilitated by ITB is able to develop wireless internet network for around 25 campuses and universities in Indonesia in the period 1997-1998, with support from Suguru Yamaguchi and Jun Murai from WIDE Project based in Japan. This initiative simultaneously becomes the forerunner to the internet kiosk network (WARNET) that spread across numerous cities in Indonesia that developed in the same period of time.

Onno W. Purbo said that students from the Universitas Muhammadiyah Malang (UMM) were the pioneers of the development of WARNET, which was mostly based on campuses. At that time this initiative was given the name WARIN, which stands for warung internet (internet kiosk). But then Onno W. Purbo proposed to change the term to WARNET to make it easier to remember and sounds cooler. At the same time, several students in Malang also developed a wireless internet network that uses packet radio technology and utilized walkie talkies so that they could connect the internet network to homes. This internet network was later given the name RT/RW-net, in which its development together with WARNET became the foundation for the further development of community networks movement in Indonesia.

At that time, basically Onno W. Purbo wanted to share the free knowledge and provide affordable high-speed

internet access for the wider community, including all campuses and communities which incorporated in the AI3 network that utilized the connection to JCSAT satellite. However, because internet policies and regulations tend to favour telecommunications operators, the cost of high-speed internet is still expensive for people in general. That time the AI3 network was already able to provide internet access with the speed up to 2 Mbps, which gradually encouraged some local ISPs to improve internet services in order to provide high-speed internet access. According to Onno W. Purbo, most of the community networks in that period utilized illegal frequency in 900 Mhz to provide more affordable wireless internet connectivity, which made him almost went to prison and received a warning from the Director-General of Post and Telecommunications. In its later development, the most of community networks that utilized packet radio technology began to switch to the 2.4 MHz frequency as it was successfully proposed as a license-exempt frequency through the Decree of the Director-General of Post and Telecommunication No. 241/2000 for the shared use of the band 2400-2483.5 MHz, as well between Wireless LAN Internet access for users outside the building (outdoor) and Microwave links.

However, until 2001 there were still raids and confiscations of wireless internet devices so that it triggered resistance

movement by community networks in various regions in Indonesia. At that time, the support for advocacy is conducted by wireless device users who are members of the Indonesian Association of Wireless Internet Users (INDOWLI), who also have the support from the Indonesian Internet Service Providers Association (APJII). Onno W. Purbo sent a protest letter and stated not to set foot into the Post and Telecommunication office as long as wireless internet users were still being swept and the radio frequency regulation was not in favour of the common interest of Indonesian people. This community networks movement finally succeeded in encouraging the release of Ministerial Decree No. 2/2005 concerning Wireless Internet on the 2.4 GHz frequency on January 5, 2005. In general, this decree waives permission to use the 2.4 GHz frequency as long as the maximum transmit power is limited up to 100 mW, the maximum EIRP is in 36 dBm and all equipment has been through the official certification process. The release of this policy became an important milestone for the community networks movement in Indonesia, which later on also inspires the development of community networks in many other countries.

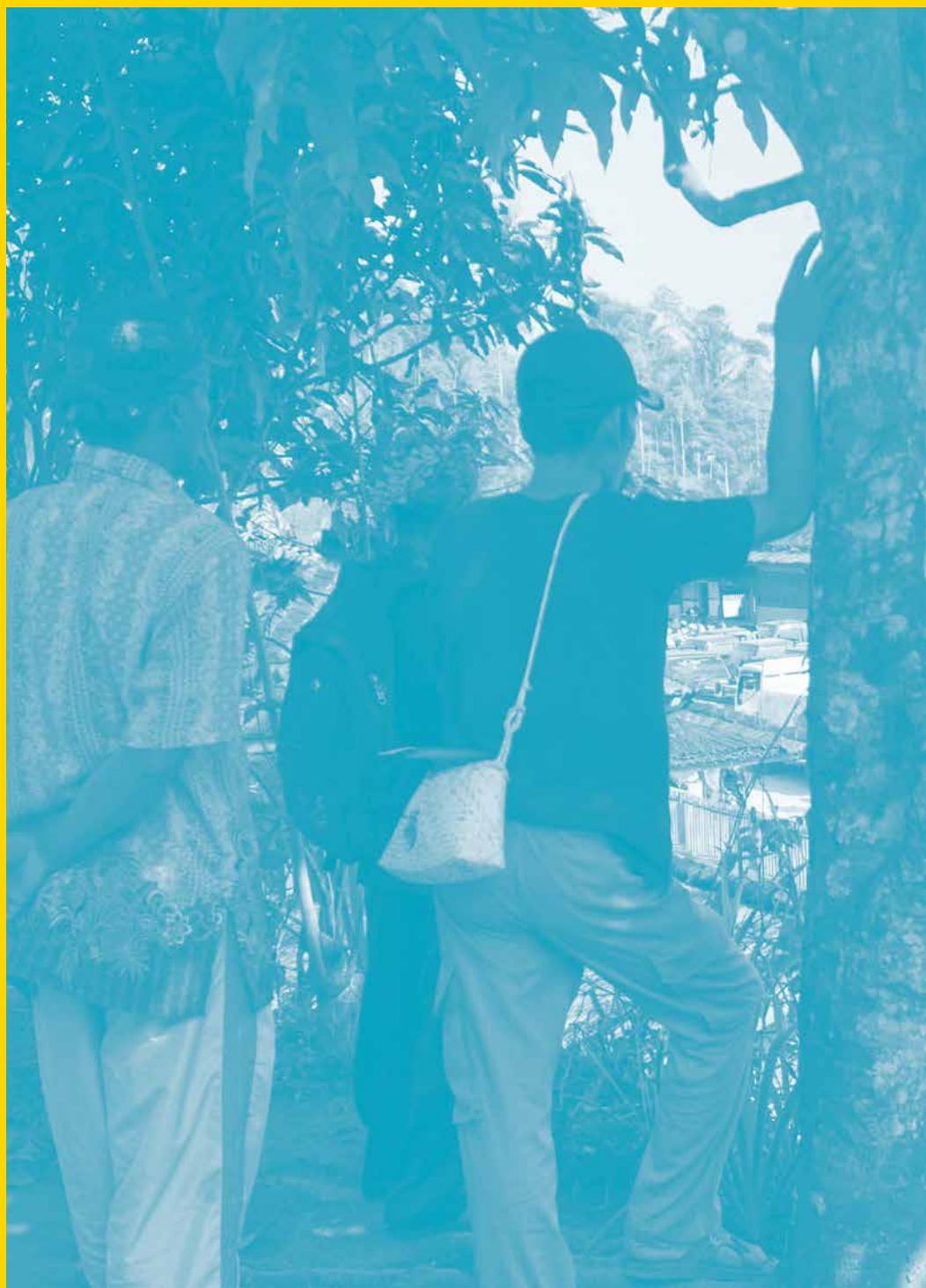
The complete interview with Onno W. Purbo can be accessed through the following URL: <https://youtu.be/qrVc4hHoQf8>

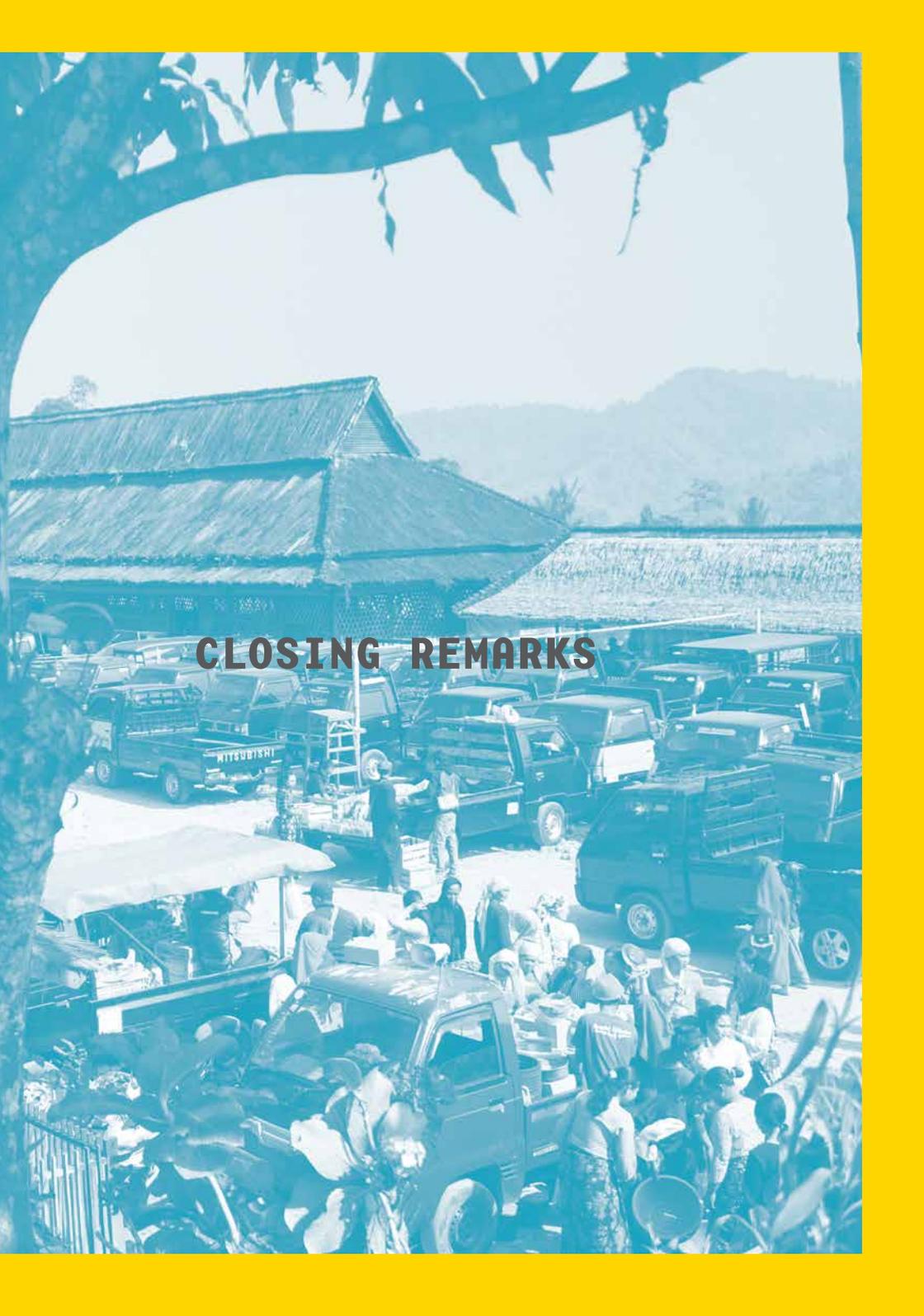
## SHORT PROFILE: ONNO W. PURBO

Onno W. Purbo was born in Bandung on August 17, 1962. He is known as an expert in the field of information technology who is also a pioneer in the development of internet connectivity in Indonesia. He studied electrical engineering at the Bandung Institute of Technology (ITB) in 1981 and graduated in 1997. He received a scholarship to continue his studies at McMaster University (1989), and the University of Waterloo (1993), Canada; where he learns laser semiconductor and fibre optic technology, as well as silicon devices and integrated circuits. After completing his study in Canada, he worked as a lecturer at ITB until 2000. While still working as a lecturer at ITB, he co-founded the Computer Network Research Group (CNRG) in 1994. Furthermore, he brought the CNRG team to develop library management in the Knowledge Management Research Group (KMRG) when he headed the ITB Central Library in early 1999, which then successfully established the Digital Library and Library Network that links at least 20 library units throughout Indonesia. Apart from this, his interest in exploring packet radio technology to develop reliable and affordable wireless internet networks had a significant influence on the community networks movement in Indonesia. Up until now, Onno W. Purbo is also known as one of the driving forces of the open-source and copyleft movement in Indonesia, which actively disseminates free knowledge about



computation and internet technology. Currently, Onno W. Purbo is working as an independent writer and one of the board of advisory for Indonesia ICT Watch, besides actively engages as a speaker, facilitator, lecturer, as well as instructor in the field of internet technology and also involved in the community networks movements in the local and global level.





## **CLOSING REMARKS**

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## CLOSING REMARKS

The implementation of APC CNLG and Pathfinder projects that are focused on the learning process in developing community networks and local internet infrastructure in the Kasepuhan Ciptagelar indigenous community region have been running throughout 2019. Some of the activities that have been ignited after the inception meeting in Kenya in early 2019 is revolving to numerous activities carried out simultaneously in the Global South and stimulates various initiatives that enrich our common understanding about the local community-based internet infrastructure, including the policy and practice of community networks development which has diverse approach and perspective. In the Kasepuhan Ciptagelar region, the efforts to develop community networks initiative and local internet infrastructure development are been integrated with certain cultural rituals, local customs and traditions, besides actively engaged the local village residents so these activities can run smoothly and supported by community members.

At present some members of the Kasepuhan Ciptagelar indigenous community have been able to access affordable and reliable internet connectivity. The local community members have also been able to manage and develop existing internet infrastructure, and gradually continue to expand the coverage area of wireless internet connections that have been built together as the result from several workshops and training that is being organized as part of the community networks and local internet infrastructure development. In addition to supporting the effective and meaningful communication processes, the local community also began to utilize the internet to produce and disseminate local knowledge and digital content. In the future, these initiatives are also expected to have an impact on the efforts to empower local communities, including to support conservation and preservation of forests area, as well as protection and official recognition of indigenous rights in the region.

As part of the closures for the implementation of this year's program, Talant Sultanov as the APC Asia regional network coordinator carried out a peer visit activities to Kasepuhan Ciptagelar Village from 27 to 29 December 2019. During his visit, Talant had involved in the activities of cleaning up the swidden paddy fields (Ngarambas) together with the local community which were carried out on Sunday, the 28th of December 2019. At that time he manages to interviewed Adam, a 12-year-old boy who is CIGA TV crew. He is Ki Jumsa's son, a resident of Kasepuhan Ciptagelar who is also a Rorokan Jero's assistant (Rendangan). CIGA TV is a community TV station that is run by local residents in Kasepuhan Ciptagelar Village. When Arum Tresnaningtyas Dayuputri held a digital storytelling workshop, he took part and produced a video about the sacred barn (Leuit Si Jimat) and broadcast his work





on CIGA TV. During the interview, Adam said to Talant that he also helped to sell internet voucher to residents in Kasepuhan Ciptagelar Village. As he told Talant, there are a lot of people who started to use the internet in the village and he managed to save some money by selling the internet voucher.

On his visit, Talant also followed a blessing procession (Beberes) by visiting Abah Anom's grave on Pengapungan Hill. Abah Anom is the former chief leader of Kasepuhan Ciptagelar indigenous community who is the father of Abah Ugi. In between these activities, he also took a short visit to micro-hydro turbines in Situ Murni Village. The peer visit activities were then continued with several other processions, including to tell a story

(Nyarita) about the implementation of the community networks development to Abah Ugi, before participating in the community gathering and praying rituals together with some community representatives in the evening. The whole activities for this community gathering and rituals were led directly by Aki Karma as one of the customary elders' representatives who also had the responsibility as a customary shaman (Rorokan Jero). On his remarks during the community gathering activity, Talant expressed his gratitude to the community member of Kasepuhan Ciptagelar who helped the implementation of community networks and the local internet infrastructure development in the Kasepuhan Ciptagelar region.



Personally, he feels that he has a close relationship with the Kasepuhan Ciptagelar indigenous community, so he really hopes that what has been implemented together with APC community networks can grow well in the future. Before he returned to Jakarta on Monday, 29th of December 2019, he took time to visit BTS Pengapungan, which is located not too far from Kasepuhan Ciptagelar Village. In addition to this, he also visited the sacred forest area around the Cibareno River. Through some of these brief encounters, he can directly experience the efforts to develop community networks and local internet infrastructure in the Kasepuhan Ciptagelar indigenous community region that have been integrated with the local customs, culture, and traditions among the community members, including

the indigenous forests and natural environment that exists in this region. As he said sometime before leaving the Kasepuhan Ciptagelar Village, this approach is very important for retaining the collective efforts that able to support a meaningful and empowering community networks building both in the local and global context.

Talant Sultanov's interview with Adam can be accessed through this following URL: <https://youtu.be/ye0WCIJCddM>













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## Acknowledgment

This project is made possible with generous support and encouragement from numerous individuals and institutions who brought a shared vision to build community networks movement and community-based internet infrastructure that bring the spirit of openness, equality, freedom of expression, solidarity, and emancipation from the Global South. Therefore we would like to send our gratitude to our friends, colleagues and institution in the following:

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Abah Ugi, Mamah Alit, Yoyo Yogasmana, Umi Kusumawati, Aki Karma, all the elders and Kasepuhan Ciptagelar indigenous community

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### **Indonesia ICT Watch**

Indriyatno Banyumurti, Donny B.U. and Onno W. Purbo

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### **Photo Credit**

Nicolás Pace/APC, Awinet Team, Abah Ugi, Arum Tresnaningtyas Dayuputri, Gustaff H. Iskandar, Talitha Yurdhika & Talant Sultanov

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## Project Team

### ARUM DAYU

Arum Tresnaningtyas Dayuputri was born on the 12th of April 1984 in Solo and currently lives and works in Bandung. She began her career as a photojournalist at Kompas Daily for 4 years and then continued her Diploma in Photojournalism at Ateneo de Manila University. Although her journalistic background is very strong, Arum realizes that the world of photography is very broad. She is then interested in learning new things and possibilities using photography as her medium. One of her initiatives is holding a discussion and study class called 'We Have a Story/Kami Punya Cerita' (photography for all). The activity was taking place at Tobucil and Klabs, and functioned as space for learning and sharing for anyone interested in photography. Up until now 'We Have a Story' already has 15 batches. As a photographer, Arum prefers to make exhibitions that explore new spaces and a wider public. For example, the solo project entitled 'Touring Exhibition in 5 Pantura City' (Pameran Keliling 5 Kota Pantura), a photo project about Pantura, the term for the northern coastal city in Java and its dangdut music scene which is exhibited in the form of newspapers, photos and posters depicting the dangdut music concert in Brebes, Tegal, Cirebon, Indramayu and Kuningan in 2013. She also undertakes several photography workshops which include, 'Angkor Photo Workshop' (2010); 'Stream Photo Asia Bangkok (2011);



'Training for Trainer Panna Photo Institute' (2013); and 'Photobook Masterclass' by Antara Photojournalistic Gallery (2013). In addition, Arum also explores video for her work and making a documentary about the figure of Ali Sadikin entitled 'The Footprint of Bang Ali' (Jejak Bang Ali) by utilizing the archives of the Jakarta Arts Council, through the Grant Program of Work (2013) from the Indonesian Visual Art Archive (IVAA). Currently, Arum is continuing her master at the Bandung Institute of Technology (ITB), as well as making artworks and taking part in some exhibitions, besides engaging in activities developed together with the Common Room.

## BONAFASIUH HENDRA PURNAMA

Bonafasius Hendra Purnama was born in the city of Bandung on 8th of August 1995. After graduating from Santa Maria 2 Bandung High School in 2013, he worked as an administrative staff at the Santo Borromeus Hospital before continuing his work in the field of administration and quality control at the Qubicle Sorasoca in Bandung until 2017. Furthermore, he began actively involved in Common Room activities to handle administration and accounting in early 2019. He has some interest to be involved in indigenous peoples' empowerment and is also active in the youth empowerment program with his church in Bandung.



## GUSTAFF H. ISKANDAR

Gustaff Harriman Iskandar was born in Sukabumi on 16th of August 1974 and graduated in 1999 from Fine Arts Department, Bandung Institute of Technology. After finishing his study, he runs Poros Art Management and actively curates, wrote, and organizing visual art exhibitions until 2000. Furthermore, he initiates the publishing of Trolley Magazine (2000 – 2001), local independent magazine that focuses on art, culture, music and fashion. By the end of 2001, he co-founded Bandung Center for New Media Arts together with Reina Wulansari, R. E. Hartanto and T. Reza Ismail, and strongly engage with the development of media arts & multidisciplinary artistic practice in Indonesia. By the year 2004, he developed the Common Room Networks Foundation (Common Room), an open platform for art, culture and ICT/Media, which later initiates urban/rural platform for collaboration to ignite creativity & innovation for rural & urban engagements on the year 2013. Working together with his wife, Reina Wulansari & other colleagues, Gustaff currently lives and works in Bandung where he continues engaging on his art and develop the organization to manage certain projects and initiatives that integrates arts, science and technology, as well as write and speaks on discussions and symposiums, besides running a small farm in Sukabumi, a small town in West Java - Indonesia.



## REINA WULANSARI

Reina Wulansari Wargahadibrata was born in Bandung on August 8, 1977. After completing her studies in graphic design at RMIT University, Melbourne in 2000, she had worked as a web designer at PT. Globalinter Netura (also known as IndoNet) until 2001. In the same period, she also worked in the creative department and public relations at the NuArt Sculpture Park in Bandung. Later at the end of 2001, she co-founded the Bandung Center for New Media Arts together with Gustaff H. Iskandar, R. E. Hartanto and T. Reza Ismail. In 2003, she had founded Reina & Partners Arts Management, which was active until 2005. In addition to this, she also co-founded the Common Room Networks Foundation (Common Room) in 2004 and managing the organization until now. In 2009, Reina also became one of the board of advisor at the Yayasan Jendela Ide, a cultural institution for children and youth in Bandung, Indonesia.

Working as the program manager in Common Room, she runs the management of the organization, including responsible for controlling the administration, finance and teamwork. She also directly involved in conferences, discussions, exhibitions, as well as art and music performances in collaboration with some partners, organizations, companies and government institutions. By supporting network development and community building,



her activities are also carried out in the cross-disciplinary fields on a local and international scale.

## TALITHA YURDHKA

Talitha Yurdhika Anni was born in Bandung on July 10, 1991. She holds a bachelor degree in communication after graduating from the Bandung Islamic University (UNISBA) in 2013. After completing her studies, she had an internship and worked in Provoke Magazine as a reporter and photographer, as well as a contributor for some online media platform. Furthermore, she worked as a copywriter and content creator at Powerswitch Agency in Jakarta until early 2019. In the same period, she also worked as a branding and event manager, as well as activation program at [beritabaik.id](http://beritabaik.id) before then joining Common Room in mid-2019. Currently, Talitha also working at Lo.Ka. Si, a co-working space that is based in Bandung. She has an interest in the field of communication, including program development, and collaboration in the field of digital media.













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