



FUTURES AND FORESIGHT IN PARTICIPATORY PLANNING

EXPLORING THE IMAGES OF THE FUTURE IN COMMUNITIES OF THE TRANSFORMING INDONESIAN CAPITAL CITY – NUSANTARA

FINLAND FUTURES RESEARCH CENTRE
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Most individuals are adept at anticipating the primary consequences of an act, event, or trend. Fewer excel at predicting secondary consequences, and seldom do people effectively consider tertiary consequences. The Futures Wheel is a straightforward and simple method designed to assist individuals and groups in anticipating potential primary, secondary, and tertiary consequences. This dynamic tool fosters brainstorming and visualizes the effects and ramifications of change. It operates similarly to a natural system; so, if we understand systems behavior in both human and natural contexts, we will be able to enhance comprehension of its capabilities.

An intriguing application of the Futures Wheel in this study was the examination of contradictions, challenges and opportunities that emerged from the diverse views and contexts observed. There is no doubt that this report serves as a significant contribution from the Finland Futures Research Centre (FFRC), and the Foresight for Resilient Cities, FoReCi Project, conveying an essential message about the role of futures and foresight in aiding cities and regions with sustainable urban development planning and implementation. By employing a systems approach that integrates humans, cities, and nature, new doors can open up to possible futures and their exploration.

Jerome Glenn, CEO

The Millennium Project

This Futures and Foresight in Participatory Planning Report authored by Ana Jones-Wilenius has been produced in the context of the Co-Creation project Foresight for Resilient Cities (FoReCi), a cross-disciplinary effort between the Centre for East Asian Studies (CEAS) and the Finland Futures Research Centre (FFRC) at the University of Turku. Special thanks to Pilvi Posio, project leader at the Centre for East Asian Studies (CEAS); to Mustika Sari at Universitas Indonesia and the Team at Otorita Ibu Kota Nusantara.

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We are grateful to the group of 12 notetakers and facilitators from the Universitas Mulawarman who mediated and collected participant's inputs. Their names, in no particular order are as the following: Fatima Ramadhanty Rahmat; Intan Baidu ri; Jeva Adelia Nanda Baihaki; Hana Gloria Ford Hutagalung; Muhammad Reza Saputra; and Daytrich Raynald. And the group of Facilitators in no particular order: Dharwati Pratama Sari; Resty Intan Putri; Nur Asriatul Kholifah; Tantra Diwa Larasati; Muhammad Rizqy Septyandy; and Ahmad Moh. Nur.

Finally, our deepest appreciation goes to the residents of Argo Mulyo and surrounding villages (A total of 30 participants approx.) who with their active participation contributed to deepen our understanding of what the future of the Nusantara development means for the region.

DISCLAIMER

The data collected from participants for the analysis of results here presented and the conclusions and inferences here made were generated through a process of mediation in which facilitators and a notetakers collected, processed, and translated (From Bahasa Indonesia to English), the inputs provided by participants during three days of foresight workshops in the Village of Argo Mulyo, East Kalimantan.

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[1] Digital Transformation Nusantara Capital Authority

[2] Business Finland

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1. INTRODUCTION

The Indonesian government is relocating its capital city Jakarta to East Kalimantan in the Island of Borneo. The development of this new national capital best known as Nusantara offers two competing narratives, one of a green and smart “World City for All” (OIKN), and another one of adverse in-situ rural transformation and construction impacts (Bunnell & Nasution, 2023). From a futures perspective, this major change prompts several questions about the images and attitudes that exist in the mind of the communities of people who will create the new social fabric of the city. Central to this is the understanding of long-term implications of those images, how they get manifested in planning, and what new opportunities will emerge from this major rural-urban transformation.

The challenges surrounding the Nusantara development are significant. Jakarta is sinking due in part to a lack of best practices in sustainability and water resource management. It is uncertain whether the Nusantara development will have the capacity to sustain a long-term commitment towards sustainable development and not to repeat the problems of the past. The decision to relocate the capital is a major transformation with social, economic, cultural, and environmental implications. There are uncertainties for ordinary people about changes in their way of life. Without a holistic examination of the impacts, decisions taken today could extend current unsustainable practices further into under developed Indonesian Islands and territories.

Establishing a new capital will result in different images, preoccupations and hopes in the mind of the people who will inherit the development. The ongoing development process will bring land use and ownership changes, in some cases requiring that owners either sell their land or relocate to other areas. Many already fear the weight of a new city that could bring more people, traffic congestion, and less jobs opportunities to the island. Their fears are connected to the future of their region, farms, their family’s wellbeing and ultimately, to the future of new capital city. Understanding what these images are at this early stage of the development phase can contribute to better participatory planning practices and shed light on the alternative futures that the development will open up in the years to come.

Using futures and foresight methods and tools, our task has been to explore the attitudes and perceptions held by local and migrant residents towards the new capital city. We collected, processed and analyse the perceptions and expectations of six different groups of residents from the Argo Mulyo Village in the (Sepaku District) and from other surrounding villages. The groups were invited to take part on a series of futures workshops designed to be participatory. This Futures and Foresight in Participatory Urban Planning report informs on the foresight process steps that were conducted and the results from the workshops activities.

The foresight process followed the following four steps:

STEP 1: Research review, background and identification of the issues from ongoing research on happiness by the Nusantara capital city team (OIKN).

STEP 2: Exploration of images of the future as conceptual basis to understand perceptions and expectations with potential to influence future outcomes.

STEP 3: Using participatory futures workshops, the futures wheel and the *greensight* approach.

STEP 4: Content analysis and results.

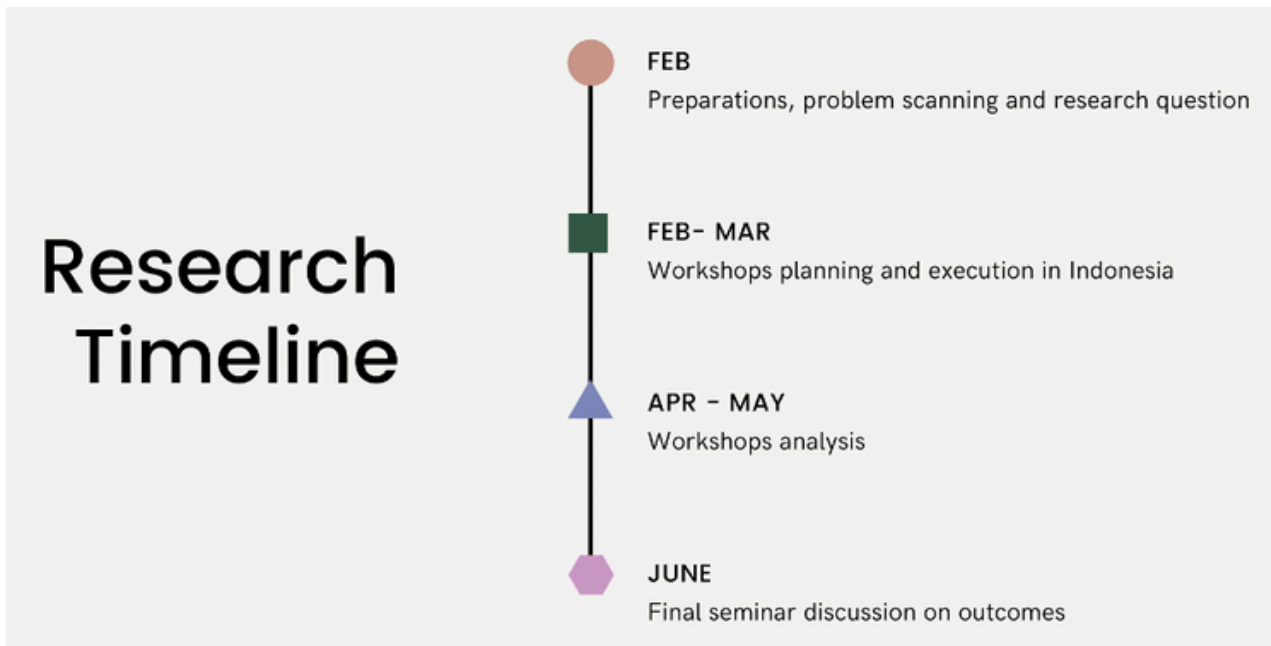


Image 1: Foresight FoReCi project timeline

This report was prepared in the frame of the Foresight for Resilient Cities (FoReCi) project. The report explains the foresight process and workshop activities that were conducted in the Village of Argo Mulyo, East Kalimantan last March. The goal of the foresight process design was to investigate the stakeholder's perceptions and expectations towards the new national capital city, Nusantara. The study adds dimension to the current discussion on urban resilience and sustainable futures particularly sensitive areas of the globe where development might have adverse consequences.

This report is divided into three parts. The first part introduces the Nusantara development and the key challenges surrounding the development. The second part explains the foresight process and the futures methodology used. The last part explains the results and conclusions obtained from the village residents.

Futures and foresight methods and tools were used to explore images of the future to contribute in the visualization and holistic understanding of a major urban transformation. The timeline of the foresight intervention was approximately five months (See image-1 above). The results of the workshops complement the ongoing research on happiness which is being conducted by the Nusantara Capital City Authority (OIKN).



1.1 THE FORESIGHT PROCESS

Foresight constitutes a systematic way to evaluate mid- to long-term future opportunities and risks, which may enhance the ability to make well-informed decisions in the present. Foresight processes aim to generate significant value by for example shaping policy outcomes and facilitating strategic planning initiatives. The practice of foresight creates the possibility for emergence and it helps to reveal critical facets that may otherwise remain unobserved or ignored.

This foresight process combines participatory futures methods and applications for the purpose of exploring the perceptions of citizens toward the new capital city. For this, six groups of residents with particular socio-demographic profiles were assembled. The groups were arranged in the following categories: Students; Housewives; Civil Servants (local); Traders and SMEs (Local); Civil Servants (Migrants); Traders and SMEs (Migrants) as shown in the foresight process below (See image-2). The *greensight* framework was used to explore relational aspects between the built (New capital city) and nature-related qualities that characterise the context and the spatial geo-ecological position of this new development.

FORESIGHT PROCESS

(by Ana Jones, 2024)

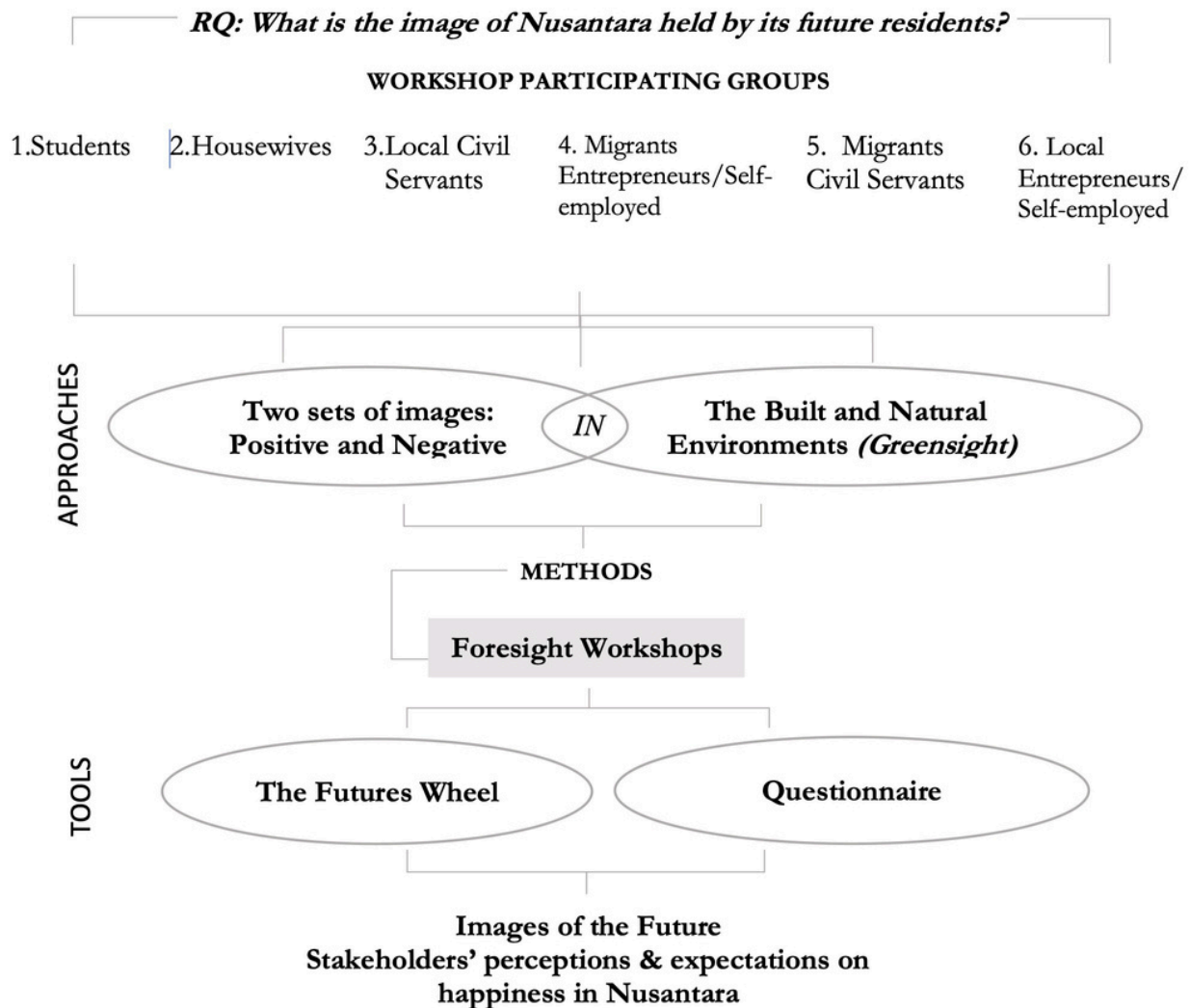


Image 2: Foresight process implemented during the futures workshops in Indonesia

This qualitative research refers to Nusantara current development phase-1 for 2022-2024, the period when the transfer of selected government offices is scheduled to begin. Analyses and assumptions build on the workshops brainstorming sessions with participants. During this time, group work was done using futures wheel exercises, visualisation activities and a pilot workshop for testing the *greensight* framework. Additionally, insights were obtained from photographing and journaling and from doing empirical observations of day-to-day life during trips to and between Jakarta and Balikpapan meeting with academics, public officials and entrepreneurs and through informal encounters with the local residents from the Village of Argo Mulyo.

1.2 IMAGES OF THE FUTURE

Images of the future are known to be important components of the future itself. Many futurists who have studied images of the future found that they play an important role in framing the actions that people take in the present to fulfill their ideal future (Polak, 1973), (Bell, 1997), (Mau, 1968), (Rubin, 2013). According to Jim Dator, what futures and foresight processes contribute to, are to “help people move their images and actions beyond an attempt passively to forecast the future (Dator, 2019).” Also interestingly, Frank Hutchinson elevated images of the future addressing them as the basis for illuminating more just and sustainable futures:

Images of the future in the Western world often hinge narrowly around scientific and technological developments, sometimes seen as beneficial but more often as dystopian. It is as if science and technology have a life of their own which the ordinary citizen feels she can neither understand nor control. In the face of such fears, it is increasingly important to focus on people’s images of preferred futures. If they can be elaborated and envisioned more clearly then perhaps, they can provide the basis for creating a more just and sustainable future (Slaughter, 2019).

In the context of this Indonesia’s new capital project, the attitudes held by residents toward the new development offered a significant source of knowledge and reflections on the long-term futures that could evolve from this multi-faceted change. Evidently, a major urban transformation which is likely to influence the hopes, and fears held by the different demographical groups that already exist but also the new ones that will form overtime. While a strong emphasis has been placed on portraying Nusantara as a modern, smart, resilient, and green city, much less is mentioned about how equitable the integration of communities is dealt with or how people’s attitudes towards the future, in this new socio-environmental Nusantara context, could influence the success or failure of the new city. Using images of the future as the basis, this research focuses on public participation in the relocation of Indonesia’s new capital and explores the attitudes and expectations of its inhabitants toward that change.

Through the use of participatory futures praxis, and the futures wheel (Glenn, 2009), the foresight approach presented here explores the positive-optimistic and negative-pessimistic images held by six different groups of residents of the Nusantara capital city. The six participating groups were composed of the following: Students, housewives, public servants, businesses and SMEs. In addition, the study uses the *greensight* conceptual framework (Hodson et al., 2023) to address and contrast the built and the natural contexts in which images of the futures are embedded.

1.3. INDONESIA'S NEW CAPITAL CITY – NUSANTARA



Image 6: Map of Indonesia showing the location of the new capital city. Source: Nusantara National Capital Authority (OIKN).

The capital of Indonesia is being moved to East Kalimantan in the Island of Borneo, roughly 1300 km away from Jakarta (See image 6). This major change in the socio-ecological structure of the region will most likely generate a significant impact on the future of various communities living and working in the villages in rural areas. The new development will consolidate people from different groups and backgrounds, some coming from the local villages while others from further away cities and regions. According to the development plan, already new residents are expected to move in as early as September 2024.

→ Nusantara Challenges

The challenges that this major development face are multiple. Among them, some of the most notorious are:

1. Insufficient of public awareness and social responsibility
2. Not enough attention put into the management of natural resources and sustainability
3. Uncertainties about the future sustainability of the re-urbanization process
4. Nusantara represents a major rural transformation

The lack of public awareness and the limited attention placed on natural resource management and sustainability could undoubtedly hinder progress and limit the development of high sustainability principles planned for the development of a green, resilient and sustainable Nusantara. These factors are likely to affect the interest and participation from the side of the residents if insufficient know-how and sustainability education does not develop broader within the public institutions. It is impossible to foresee the type of urbanization that will evolve in the region as a result of the transformation of the capital city. Furthermore, it is not evident how social, economic and cultural aspects integrate environment-related aspects in the minds of the general public.

The approach to foresight in this project draws from the ongoing Nusantara Happiness Research Project by the Deputy of Green and Digital Transformation Nusantara Capital Authority (OIKN) and studies of urban happiness centered around well-being (See image 10). The purpose of using foresight was primarily to apply a futures-oriented approach to resident's participation in the Nusantara transformation thus contributing to adding decision making value of policies and recommendations that enhance happiness for the community of residents impacted by this major rural-urban transformation.



Image 7: Balikpapan-East Kalimantan, Indonesia. Photo by Ana Jones, March 2024.

1.4 THE FORECI PROJECT

The Foresight for Resilient Cities Project (FoReCi) integrates expertise on foresight, planning and AI-powered urban planning tools to develop solutions that support sustainable, inclusive, and resilient urban environments. The value of deploying foresight is to add decision making value by emphasizing holistic approaches that use futures thinking for planning the city collectively. This project has been realised in the context of Nusantara, the new Indonesian capital city envisioned to become a “smart forest city” and “a world-class city for all.” At its core, the purpose was to create opportunities for businesses and academics in the fields of urban planning and development thus build a solid foundation for a larger co-innovation project globally.

The project team was a synergy of experts on community engagement and participatory urban planning, futures studies and foresight, resilience-building, crisis management and urban sustainability governance across Asia. Project team members are: Pilvi Posio, project leader (CEAS), Ana Jones, project specialist (FFRC), Juha Kaskinen, director (FFRC), Lauri Paltemaa, professor (CEAS) and Outi Luova, university lecturer, (CEAS). SPIN Unit Lab Oy was the main collaborative company providing the generative AI-powered participatory urban planning tool.

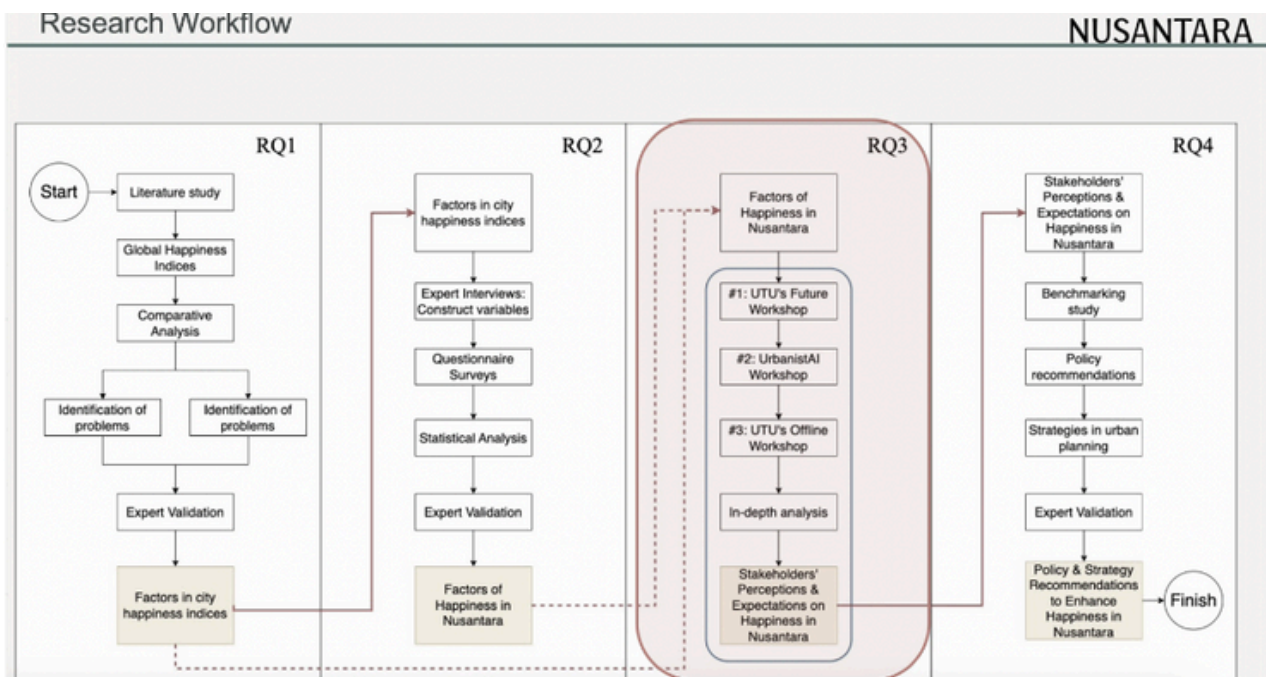


Image 8: Happiness Research Framework by the Nusantara National Capital Authority (OIKN).

2. METHODOLOGY

2.1 PARTICIPATORY FUTURES WORKSHOPS

The futures workshop method is based on ideas proposed by Robert Jungk who wanted to expand and democratize futures work by including larger groups of stakeholders in planning and decision-making processes. The method facilitates the exploration of images of the future through a process of inclusive participation in which a diverse selection of participants contributes to voicing their opinions about a particular issue or situation. In general, futures workshops are divided in three parts: 1. Situation and critique phase; 2. Selection of key issues and variables; and 3. Assessment of tools and implementation.

In this study, we use participatory futures praxis that address community factors of happiness in Nusantara. For this, we planned and executed three workshops onsite. The workshops took place in the Village of Argo Mulyo in the KIPP 1A area in the Sepaku District. The location of the Argo Mulyo village is significant as it is the site where the future public service facilities (SPU) for education, health, worship culture, sports and recreation functions are expected to be built. Table-1 shows a detail description of the workshops and the expected outputs.

Onsite Futures Workshops Description - Argo Mulyo, March 5-7, 2024			
Number of participants	Duration	Location	Workshop outputs
30	One day	Village of Argo Mulyo	Mapping key assumptions; sensing initial images in negative and positive attitudes
30	Half a day	Village of Argo Mulyo	Participants questioning context and relationality with the built and natural environments.
30	One day	Village of Argo Mulyo	Assessment of images co-creating an action plan on the future of happiness in the communities of Nusantara

Table-1: Workshops Description

The participants' profiles were assembled giving consideration to different socio-demographical backgrounds and were mainly local village residents. The sample of participants in the study was curated by the local Nusantara Capital City Authority (OIKN) and as part of community empowerment activities for Nusantara residents. The six groups recruited for the study were in the following categories: 1. Students; 2. Housewives; 3. Civil Servants (Local); 4. Traders and SMEs (Migrants); 5. Civil Servants (Migrants); and 6. Traders and SMEs (Local).

Participants of Group-1:Students included bachelor students aged 21-35 years old. Group-2 of housewives were women between the ages of 21-50. Civil servants included both, locals from the Argo Mulyo village as well as migrants from villages outside Argo Mulyo. Their age groups were predominantly between 21-55. Similarly, entrepreneurs and SMEs groups came from local and migrant villages. Their age group was predominantly between 21-55 (See Table-2 below). The contribution by the group of public servants was important as public service areas are priority areas for the new development. The group of entrepreneurs and SMEs provided insights into the areas of innovation, job creation and economic development. The students group contributed to gaining perspective about the future of work and housewives gave insights into family-related implications of the new development.

Group	Occupation	Age Group	Area	Description
1	Students	21–35 (4 participants) 36–50 (1 participant)	Village of Argo Mulyo	Students with a Bachelor Degree
2	Housewives	21–35 (2-participants) 36–50 (2-participants)	Village of Argo Mulyo and outside	Female housewives
3	Civil Servants (Locals)	21–35 (1-participants) 36–50 (1-participants) 40–55 (3-participant)	Village of Argo Mulyo	Local natives from Kalimantan, instructors in agriculture, hydroponics and from the Ministry for Public Works
4	SME Entrepreneurs/Self-employed (Migrants)	21–35 (5 participants)	Villages outside of Argo Mulyo	SME, Self-employed entrepreneurs in food, healthcare and other trades, privately employed residents from outside Argo Mulyo
5	Civil Servants (Migrants)	21–35 (2-participants) 36–50 (2-participants) 51–65 (1-participant)	Villages outside of Argo Mulyo	Youth educators, school supervisors, sub-district service agents- migrants from outside Argo Mulyo
6	SME Entrepreneurs/Self-employed (Locals)	21–55 (5-participants)	Village of Argo Mulyo	SME Self-employed entrepreneurs

Table-2: Profile of the Futures Workshops Participants

The language used to communicate with participants, during the group discussions and activities was the local Bahasa Indonesian language, this was to help minimize language and cultural barriers thus improve the clarity and fluidity of information in each of the groups. It is worth mentioning that in spite of the efforts to include a diverse group of participants, the study fell short of including vulnerable groups of children, elderly people and people with disabilities.

The role of notetakers and facilitators in the process played a crucial role for collecting and processing the images of participants. Facilitators guided and discussed with the participants while a notetakers recorded all the results of the discussions of the participants and facilitators. Appendix A gives a detail list of the group of collaborators from Universitas Mulawarman how contributed to the execution of the workshops as notetakers and facilitators.

The futures workshops methodology was used to support ongoing research on happiness by the Nusantara Development Authority OIKN and the university on Indonesia. Concerning public participation, it is important to mention that in spite of the efforts to make the participatory foresight process as inclusive as possible, that is by inviting participants of diverse demographical profiles, different fields of work, gender and age diversity, etc., the lack of time and resources made it unrealistic to have representation from key groups of society including indigenous communities, children, elderly people, farmers, mine workers and others stakeholders whose role in the future development of IKN is significant but who are here unrepresented.



Image 3: Group 4: Migrants SMEs and Traders conducting group work on Day-2 of the futures workshops

2.2 THE FUTURES WHEEL

The futures wheel is a methodological tool used in futures studies and foresight invented by Jerome Glenn. The tool is widely used as a brainstorming tool to collect different degrees of consequences or effects that may be centered around a particular issue, trend or event (Glenn, 2009). Visually, the futures wheel resembles a web composed of circles linked by lines and arrows that show relationships and the direction of one effect to the next. When a futures wheel is completed, it generates a tight structured and a holistic image of the ramifications of that particular issue or event being studied in addition to the description of the links between them.

According to Jerome Glenn, the impacts that get explored through a futures wheel process “compose a mental map of the future, acting as a feedback mechanism to stimulate new thinking.” (Glenn, 2009). Implementing the tool begins with an inquiry, a core theme or issue that is positioned at the center of the web-like structure. From there, a first, secondary, tertiary and potentially further levels of impact or consequences are drawn and systematically organized.

In the scope of this project, the futures wheel has been used to study the positive and negative expectations and attitudes towards Nusantara that might ultimately lead to happiness in the different communities. The rationale behind using the future wheel as a method, was based on the functionality of the tool for engaging workshop participants. Because we were interested in exploring the realm of images held by the residents the futures wheel was used beginning with the characterizations of two sets of images: positive and negative which were explored within six groups of participants, namely: Students, Housewives, Civil Servants, and Traders and SMEs.

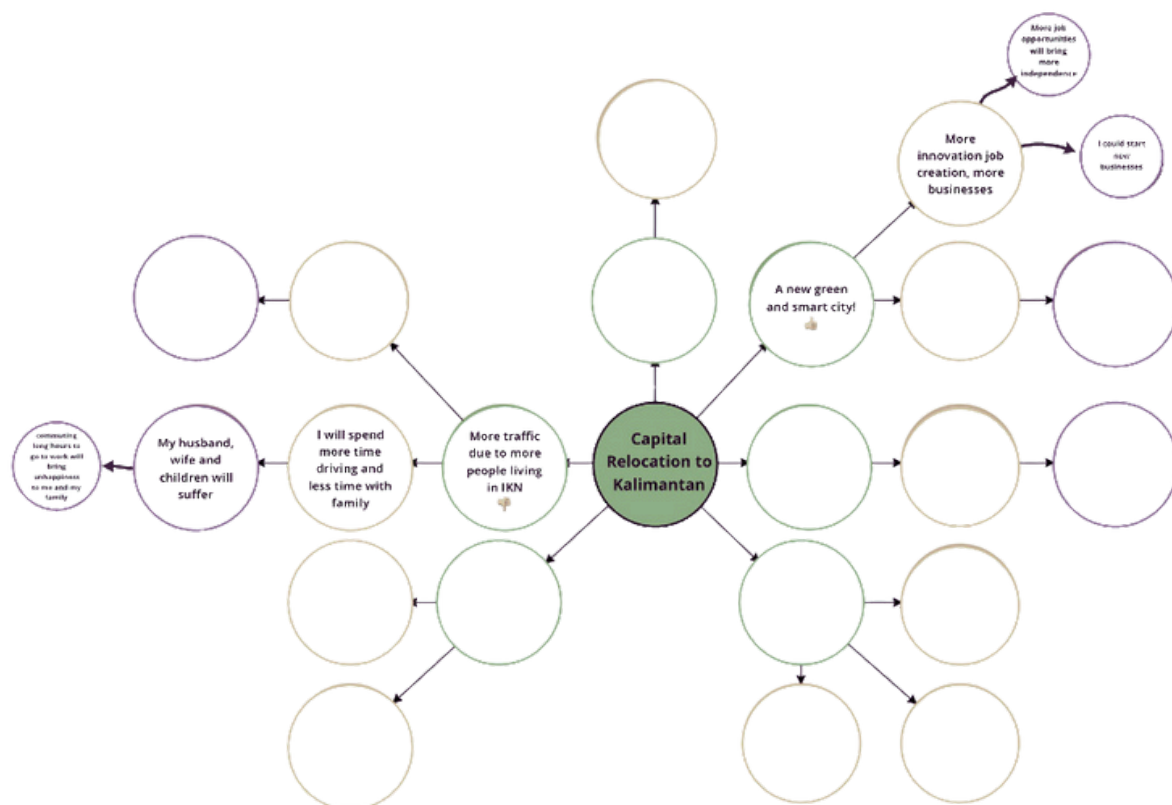


Image 4: The Futures Wheel sample diagram using Visual Paradigm Online

→ Positive-optimistic vs. negative-pessimistic images

To distill the conceived images of the two extremes, optimistic and pessimistic, the discussion was stimulated through the prompting the following questions:

1. **What comes to mind** when you think of the word Nusantara?
2. What are your **wishes** and **dreams** concerning the relocation of the future capital city?
3. What are your **fears** and **worries** concerning the relocation of the future capital city ?

The futures wheel served in the brainstorming phase of foresight process revealing the perceptions and expectations from the local community. Because of the workshop format and to facilitate the communication exchange in the group sessions, the Visual Paradigm Online[1] version of the futures wheel was used. It was possible for the co-facilitators and notetakers of each group to accessed the futures wheel online and transfer the data collected from live discussions, this capability made data gathering accessible and shareable. Additionally, physical prints of the futures wheels were distributed for each of the groups to give participants the freedom to add sticky notes when building the wheels facilitating the thought process and flow of ideas during the exercise.

The outcomes focused on summarizing the centered issue and key assumptions concerning expectations and attitudes that might ultimately lead to happiness in the community. We collected positive and negative aspirations, wishes, hopes, worries, and uncertainties of the six participating groups to then describe and analyze the images found. The futures wheel proved to be useful for its adaptability and functionality in participatory processes being deployed in combination with other methods.

[1] Visual Paradigm Online

2.3 THE GREENSIGHT FRAMEWORK AND IMAGE OF THE CITY METHOD

Greensight is a conceptual framework and approach to examine the relational significance to society of the two coexisting spheres: the built and the natural environments (See image 5). Greensight can be better understood as a futures-based approach for exploring the underpinnings of change intersecting humans within their built and natural environments. Building on this understanding is a set of indicators illuminated by the Model of Social Transformation Dynamics that Pentti Malaska, (1999) anticipated as a transformation of human needs from, tangible to intangible.

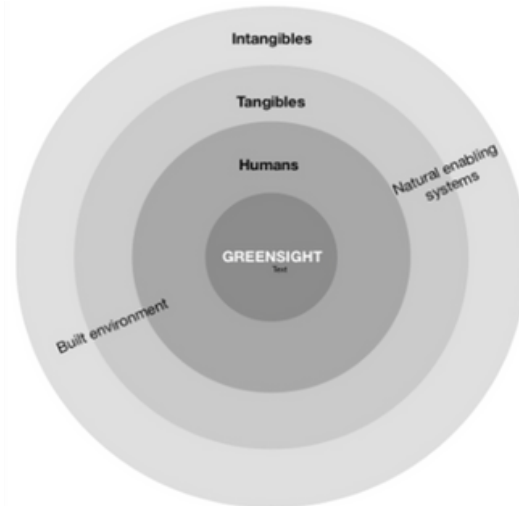


Image 5: The greensight framework (A. Jones)

Complexity theory is one way to make sense of urban systems dynamics and their transformations. Imbalances in existing systems and frameworks constitute a recurrent theme (Pereira, 2016) which can be manifested in the minor role that nature plays in creating the built environment in contrast with how much technology is shaping the function of the city. What the greensight approach can highlight against this background is the importance of resourcing to alternative mechanisms that facilitate new ideas of governance and planning. Complexity theory is one way to make sense of urban systems dynamics and their transformations. Imbalances in existing systems and frameworks constitute a recurrent theme (Pereira, 2016) which can be manifested in the minor role that nature plays in creating the built environment in contrast with how much technology is shaping the function of the city. What the greensight approach can highlight against this background is the importance of resourcing to alternative mechanisms that facilitate new ideas of governance and planning.

The greensight lens is intended to facilitate new narratives and more interrelated design approaches for studying the systems contained within the built environment. Urban transformations ask for methods that challenge our preconceived notion of linearity and individuality. For example, in the case of the digital transformation, we could argue that the increase in the digitalization of cities is a type of transformation that might catalyze behavioral change and alter the function of a city, when technology becomes further intertwined with the elements of social well-being and our life supporting systems as a whole.

The greensight approach was tested during the futures workshops to obtain built environment and natural environment images of the local and regional villages where participants lived and worked. For this purpose, a questionnaire method was adapted based on the the Image of the City method proposed by Kevin Lynch (1960). The method was useful for gathering insights from both, nature and built (city) environments by concentrating on the residents' connection to their physical, sensorial, and emotional elements of their environments.

Using the principles of imageability that have been explained by Lynch, the *greensight* framework was tested with the participating groups to explore the image of the capital city–Nusantara. The questionnaire method was a helpful tools during the workshops to gain understanding about the context that is attached to the images that the residents were holding, essentially allowing for a more explicit interpretation and understanding the architecture behind the multiplicity of images. The two questionnaires used to explore the built and natural contexts were:

1

GREENSIGHT: BUILT ENVIRONMENT QUESTIONNAIRE

1. What comes to mind/What symbolises the word (your district). to you?
2. Describe your town or district. What is interesting or uninteresting about it.
3. What are the typical trips you take going from home to work or from home to other places? Describe those trips. What do you see and hear?
4. Do you have any particular emotion about those trips something attractive about them? Do you go by foot or other means?
5. Can you name some of the distinct elements you remember from making those trips around town.
6. For what purpose do you undertake those daily activities? For example: Work, pleasure, religion purposes, etc.

2

GREENSIGHT: NATURE ENVIRONMENT QUESTIONNAIRE

1. What comes to mind when you hear the word forest?
2. Interacting with nature: Describe the natural elements that make part of your local environment: For example: Do you have a garden at home? A pond with fish, what kind of animals do you interact with?
3. What activities do you do in your day-to-day that connect to nature?
4. Describe the emotions or feelings do you experience in connecting with nature?
5. How do you connect with nature? Is nature something that you consider necessary or important?
6. Does interacting with nature makes you happy? Why? How?

3.1 POSITIVE AND NEGATIVE PERCEPTIONS USING THE FUTURES WHEEL

The analysis of the futures wheel exercises were done in a series of steps. First, the inputs from the first, secondary and tertiary consequences were systematically organised for each of the two optimistic and pessimistic images explored, and further developed as narratives (See page 25) . From there, key challenges, opportunities, and contradictions were drawn. Out of the six groups, a separate comparative analysis was conducted between the SMEs /traders and the civil servants for both, the local and migrant groups, to explore the contrasting elements in images they held. The comparative analysis allowed to study if the internal or external context could have a role in the images of the capital city.

The results were further analysed based on factors of subjective happiness that include governance, social, economic, environmental and cultural factors. The characterisation of the two main community-level images of Nusantara was substantiated from prevalent factors that emerged, linked primarily to: Governance, work and education, values, and public participation.

Positive and Negative Images of Nusantara

The results of the futures wheels were assessed for each of the six participating groups. The groups produced a total of twelve futures wheels. Below, the futures wheels show the first effects (green), the secondary (orange) and tertiary (red) effects. At the center of the futures wheel was the relocation of the Nusantara capital as the central theme organizing the thought process. The activity was organized in a 2-step:

→ Step 1

Gathering *optimistic* images in the wishes and dreams concerning the future capital city relocation to East Kalimantan

→ Step 2

Gathering *pessimistic* images in the fears and worries concerning the future capital relocation to East Kalimantan

Image 9: Visual diagrams of the 6 futures wheels generated during the futures workshop exploring **positive** images

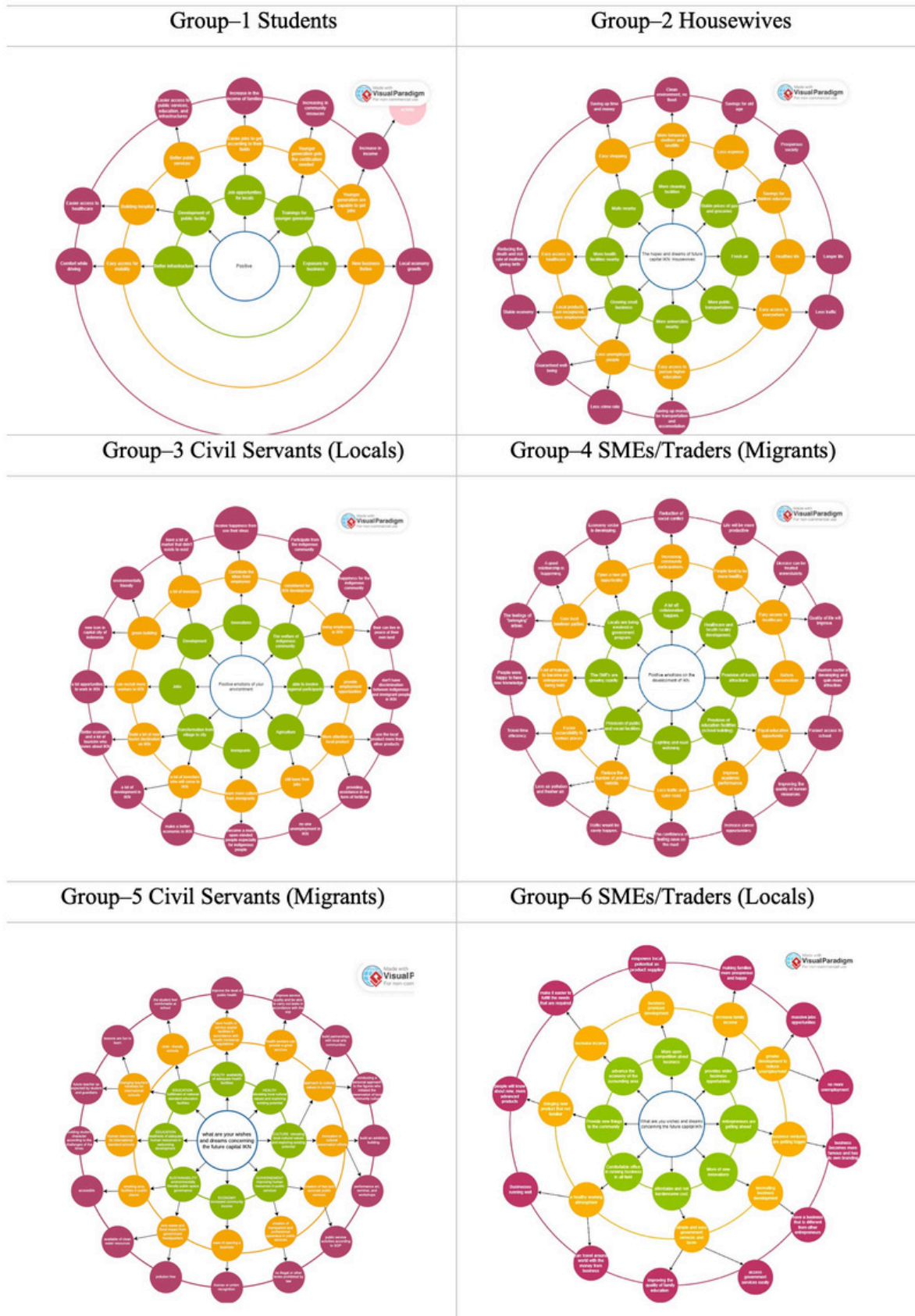


Image 10: Visual diagrams of the 6 futures wheels generated during the futures workshops exploring **negative** images

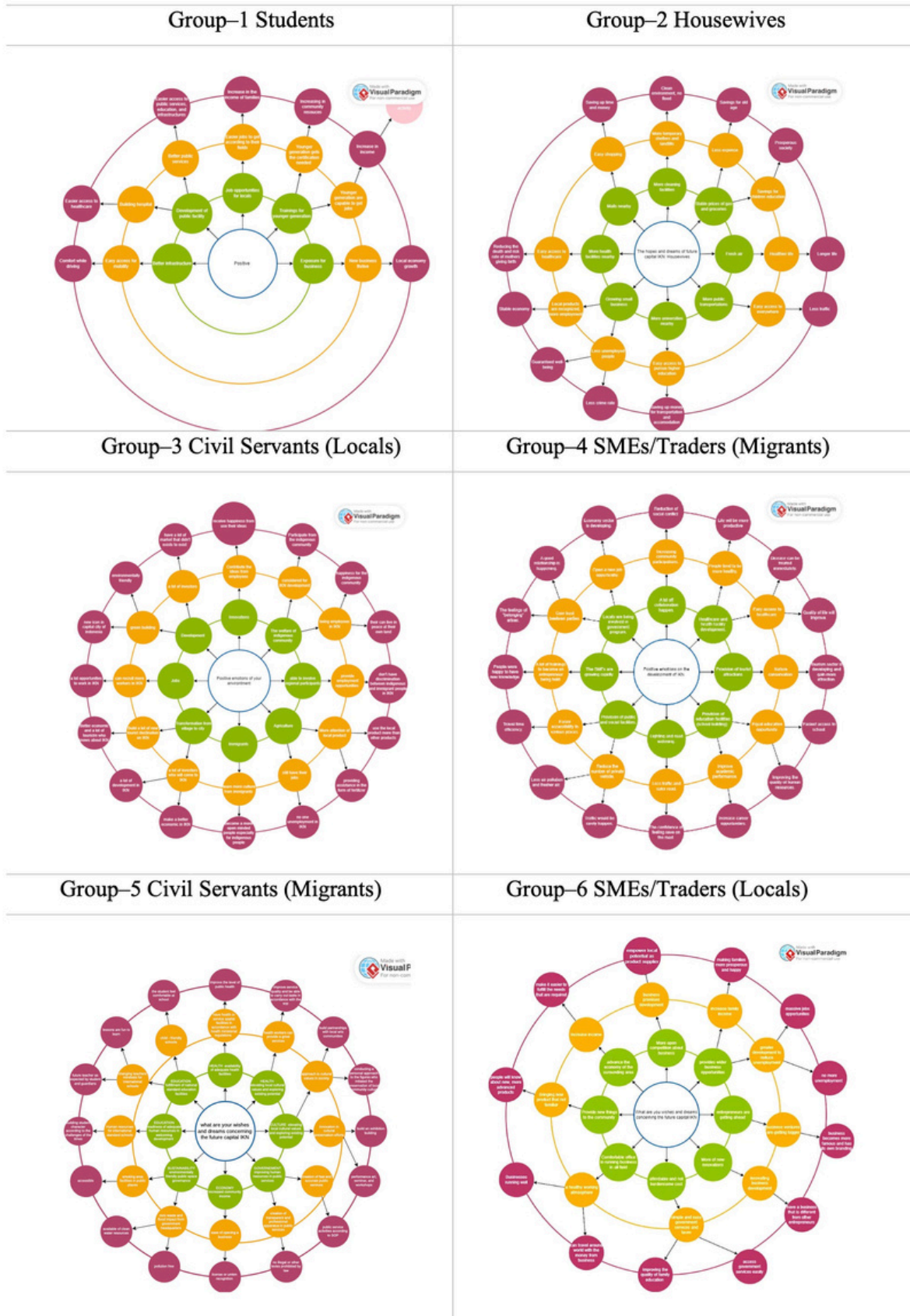


Table-3 and table-4 show the results of positive and negative consequences collected. The total number of positive consequences reported for the six groups was 185 and 170 negative consequences which means that the participants have slightly more positive views than negative views towards the development of the capital. The results were balanced between positivistic images of progress through and pessimistic images an overcrowded and trafficked and chaotic type of development in the future. The largest number consequences entered came Civil Servants groups but this coincides with public service facilities (SPU) that are expected for the area

Table-3: Shows the number of <i>positive</i> effects of the new Indonesian capital development in the local region.			
Group #	First effect	Secondary effect	Tertiary effect
1- Students	5	7	7
2- Housewives	8	10	11
3- Civil Servants (Locals)	8	12	16
4- Traders & SMEs (Migrants)	8	12	16
5 - Civil Servants (Migrants)	8	12	16
6- Traders and SMEs (Locals)	8	9	12
Total	45	62	78

Table-4: Shows the number of <i>negative</i> effects of the new Indonesian capital development in the local region.			
Group #	First Effect	Secondary Effect	Tertiary Effect
1- Students	8	11	11
2- Housewives	5	11	10
3- Civil Servants (Locals)	8	12	16
4- Traders & SMEs (Migrants)	5	7	9
5 - Civil Servants (Migrants)	9	11	15
6- Traders and SMEs (Locals)	7	7	8
Total	42	59	69

Positive group narratives per group based on futures wheel results exploring the question:

25

What are your wishes and dreams concerning the future capital IKN relocation?

GROUP-1: Training for younger generation will mean that young people could get the certifications needed to be able to find jobs. In turn, this will create an increase in community resources further generating income for people and potentially contributing to lower the crime rate. Job opportunities for locals means it will be easier for them to find jobs in their specific fields thus create an increase the income of families. Small businesses exposure will help new businesses thrive and boost local economic growth. Development of public facilities will create more hospitals thus improve the access and the quality of healthcare and public services including education. Better mobility infrastructure will allow easy access and comfort while driving on better roads.

GROUP 2: More public transportation will allow for easier access to become mobile resulting on less traffic as people use more public transport. More universities nearby will increase access to higher education saving up money on transportation and accommodation. Growing small businesses where local products get recognized will lead to less unemployed people. More employment will help lower the crime rates and guarantee wellbeing. More health facilities nearby mean easy access to healthcare, reducing the death and risk rate of mothers giving birth. Stable price of gas and groceries and lower expenses that will allow savings for children education and a prosperous society. Furthermore, malls access nearby will allow for easy shopping saving up time and money. Fresh air that contributes to a healthier life and savings for the old age. More temporary shelters and landfills. More cleaning facilities and clean environment will prevent flooding.

GROUP 3: More innovations that take into account the ideas of employees which will, in turn, help employees feel happier that their ideas are being taken into account. The welfare of indigenous community considered through participation of the indigenous community in the development of the IKN by making indigenous communities the employees in IKN. The happiness of the indigenous community means that they can live in peace at their own land and don't feel discriminated against, that there is no discrimination between indigenous peoples and migrants coming from outside into IKN. Development will involve regional participants and provide employment opportunities. Agriculture will put more attention to local products, still holding old jobs but using local products more than other products and providing assistance in the form of products like fertilizers so that there is no one person unemployed in IKN. Migrants can learn more about the local culture and become a more open-minded especially towards indigenous groups. Jobs can recruit more workers in IKN with a lot opportunities to work in IKN. Development of green building will bring a lot of investors to IKN and turn IKN can become a new iconic capital city for Indonesia, that is environmentally friendly opening up a lot of new markets that do not exists yet. The transformation from village to city will bring a lot of investors to IKN with the possibility to build a lot of new tourist destinations, improve the economy, promote development with the result that an increase in tourism will bring people to get to know IKN. A lot of development in IKN.

GROUP 4: SMEs growing rapidly will create the need for training of people to become entrepreneurs themselves. Training helps people feel happier about acquiring new knowledge that in turn can be used to establish trust between groups in society and increase the feelings of belonging and good relationships among people.

More knowledge will open new job opportunities for developing the economy sector. Government programs will open up new job opportunities for locals to get involved creating economic development. A lot of collaboration will take place increasing community participation and lowering social conflict. Healthcare and health facility development will allow easy access to healthcare so that diseases can be treated immediately improving quality of life. More provision of education facilities (school buildings) will provide access to equal education opportunities, improving the quality of human resources. More educational facilities will help improve academic performance and increase career opportunities. Lighting infrastructure and widening of roads will allow for less traffic and safer road increasing the confidence of feeling safe on the road. The provision of public transport infrastructure will help reduce the number of private vehicles, easing accessibility to various places, travel time, creating efficiencies and reduced air pollution. More public transport will result in that traffic congestion would rarely happen. Furthermore, the provision of tourist attractions through nature conservation will help the tourism sector developed and gain more attraction.

GROUP 5: The implementation of an honest, fair and clean government that is oriented towards excellent public services, that has health or service spatial facilities in accordance with health ministry regulations, improving human resources in public services and the creation of fast and accurate public services will lead to public service activities according to Standard operation procedures (SOP). The creation of transparent and professional apparatus in public service with no illegality or having levies that are prohibited by law. The elevation of local cultural values and exploration of existing potential can lead to innovation in cultural preservation efforts and to building exhibition buildings and to innovation in performing arts with seminars and workshops. Having a personal approach to the those who initiated the preservation of local community culture. Elevating cultural values will also lead to developing approaches to cultural values in society and to further develop partnerships with local arts. Having availability of adequate health facilities in accordance with the ministry of health regulations where health workers can provide great services will improve the level of public health. The fulfillment of national standard for education facilities and Child-friendly schools will make the student feel comfortable at school. Changing teachers' mindsets toward international schools where lessons are fun to learn will bring future teachers closer to what is expected by student and parents in addition to adequate human resources for welcoming development of human resources in international standard schools. Environmentally friendly public space governance with designated smoking area facilities in public places and pollution-free with zero waste and zero-flood impact development from government headquarters having availability of clean water resources.

GROUP 6: There will be more open competition for businesses and business premises development to empower local potential as product suppliers. More provision of business opportunities that will help increases the income of families making them prosperous and happy. More business opportunities will also help create greater development to reduce unemployment generating massive jobs opportunities. Entrepreneurs will be able to get ahead by joining business ventures, becoming bigger, more well-known and by creating their own brand. More affordable and not burdensome costs, simple and easy government services and taxes for Improving the quality of family education and access to government services. Comfortable office infrastructure for running business in all fields contributing to a healthy working atmosphere where businesses are running well building leverage for business traveling around the world. Provision of new things to the community by bringing new unfamiliar products from outside to familiarise the local community with new and more advanced products. Advancement of the economy of the surrounding area will increase income and make it easier to fulfil the needs that are required.

	RQ1: What are your wishes and dreams on the relocation of Nusantara?	RQ2: What are your fears and worries on the relocation Nusantara?
<i>GROUP 3</i> Local natives from Kalimantan, instructors in agriculture, hydroponics and from the Ministry for Public Works	<ul style="list-style-type: none"> Trustworthy, honest and fair government § Welfare, inclusivity and peaceful transition of indigenous groups. Building cultural capital through inclusivity and exchange. Community empowerment through innovation § Job creation and equal opportunities. Urban development catalysing socio-economic progress and tourism- an iconic city. 	<ul style="list-style-type: none"> Government not supporting the preservation of cultural heritage leaving the indigenous community vulnerable. Indigenous communities will have difficulties competing with immigrant residents. Fear of losses for the local agricultural sector, jobs taken from the hands of indigenous communities. Social divide § Development will lead to social isolation, congestion.
<i>GROUP 4</i> Migrant SME owners, Self-employed entrepreneurs from outside the Village of Argo Mulyo	<ul style="list-style-type: none"> Value in trust, peace and sense of belonging § Good government policies on public health. Community participation to counteract conflict. Elevated standards of educational facilities, access to healthcare, sanitation and clean water for QoL. Good public transport infrastructure § Nature conservation and tourism. 	<ul style="list-style-type: none"> Increase distrust and dysfunctional relationships between local government and the community. Divided and disconnected society. Competition between economic vs. public service development. Traffic disparities and inefficiencies impacting work and quality of delivery services. Increase pollution decrease QoL.
<i>GROUP 5</i> Migrant youth educators, sub-district service agents- migrants from outside the Village of Argo Mulyo	<ul style="list-style-type: none"> Transparent and honest system of governance. Public health infrastructure and services. Elevation of local culture, values and heritage. Partnerships with the arts. Human agency and economic independence. More access to education and training for better public service. Changing teaching mindsets about learning (International education). Infrastructure (Roads). 	<ul style="list-style-type: none"> limited authority from the central government to local governments. Corruption, nepotism and inefficiencies in government. Healthcare resources and cultural erosion § Erosion of cultural values by incoming cultures. Local wisdom in the indigenous peoples might get lost if cultural heritage is not preserved. The growth of marginalized groups.
<i>GROUP 6</i> Local SME, Self-employed entrepreneurs	<ul style="list-style-type: none"> Open competition for businesses § Empower local potential as product suppliers. SMEs for job creation and new business ventures and branding § Provision of new and unfamiliar products. Economic advances to fulfill the needs. 	<ul style="list-style-type: none"> Fear of monopoly of entrepreneurs with large businesses vs. small size business owners. Impact of unfair competition and of loss of competitiveness. Local small businesses will lose capital to the big businesses and shut down impacting the small (family) business ecosystem.

Table-5: Comparative Analysis of Local and Migrant SMEs And Civil Servants

→ Challenges

- The interrelationship between land ownership, economic growth and environmental issues needs more comprehensive examination. Presently, there is a pronounced emphasis on growth and economic advancement, with insufficient consideration given to the integration of these pursuits within the framework of sustainable futures.
- The efficacy of effective municipal governance could get compromised as a result of a deficit of trust in the governing body.
- Changes in lifestyle patterns in conjunction with the deterioration of vital environmental support systems, local cultural heritage, and societal norms, pose ecological and wellbeing challenges.
- The promotion and expansion of the tourism sector presents substantial obstacles to nature conservation initiatives and the preservation of ecological integrity.
- The pursuit of equity remains a fundamental challenge for the future.

→ Opportunities

- The establishment of policies and regulatory frameworks that promote healthy competition and equitable trade within the small and medium-sized enterprises (SMEs) ecosystem is vital for fostering economic resilience and sustainability.
- Knowledge transfer and expertise in futures and foresight and environmental planning are an important opportunity for increasing understanding importance of ecology in the sensitive areas the Nusantara capital city development.
- A more detailed evaluation of regional specializations concerning industries, products, and sectors exhibiting the highest potential for development is warranted.
- Educational initiatives that integrate environmental and urban studies are crucial for fostering a comprehensive understanding of these interconnected fields.
- Collaborative efforts focused on preservation should engage local communities in initiatives that seamlessly integrate environmental data with social programs aimed at promoting sustainable development.

→ Contradictions

- The realities of urban centers vs. rural villages illustrate the distinct modes of development that often impose conflicting forces upon one another.
- Dichotomies between the pace of modern urban life vs. slow pace of rural villages are not only significantly complex but also predispose these areas to social inequities and to various systemic stressors.
- The development of tourism appears is in contrast with how development will ensure the cultural and social sustainability of indigenous populations given the negative effects that tourism is having on coastal cities and island globally.
- The diverse perspectives on economic growth and development contradicts with the aims at providing access to resources, employment opportunities, and rights for local residents, indigenous populations, migrants, and non-indigenous communities.



Image 11: AI generated with FIBRES

Results from analysis of community-Level Images: LOCALS AND MIGRANTS


	<p>The LOCAL residents: Those who might have social and cultural advantages over the spatial and social development. Advantages for place making and place keeping with implications on overall management over the development</p>
Governance	<ul style="list-style-type: none"> Locals have social and cultural advantages over the spatial and social landscape that can contribute to place making and place keeping. Coordination of local stakeholders' activities can have implications for the long-term management over the development. Prioritisation of local participation in city planning is understood as resource in building communities of trust.
Work and Education	<ul style="list-style-type: none"> Education is emphasised as important for strengthening cultural values, awareness and culture preservation. Building resilience in the community through education. Prioritising the local workforce in all communities.
Economic	<ul style="list-style-type: none"> The economic advantages for small businesses are perceived as promoters of local economic growth with local products recognized as assets.
Cultural	<ul style="list-style-type: none"> Local culture and values are worth protecting to preserve the local culture. Collaborative communities that work together are able to cooperate and work collaborative.
Public participation	<ul style="list-style-type: none"> Community level participation and inclusion for building interrelations and knowledge exchange. Involvement and contributions in maintaining cultural heritage.

Table-6: Characterisation of the images of Nusantara by *locals*

The way in which images were explored here took a dual approach: One more general perspective that questioned each group's biases toward the Nusantara development, broadly looking at the direct and indirect effects and the impact that Nusantara could have in the future; and a second, more subjective approach focused on assessing the environmental and physical image of the village context from the ground, exploring purpose and the distinctive ways in which residents live, work, and move.

Some interesting findings suggest two possible yet contrasting images of the future: the image of Nusantara from the perspective of migrants and another image from the perspective of the locals. In the case of the migrant communities who will need to relocate from surrounding villages or neighbourhoods, the image of the future looks uncertain, risky, and disadvantageous compared to the locals when meeting them in the same line of work and industry. By contrast, in the case of the locals, a more optimistic image rested on their knowledge and social, cultural, and spatial advantages.


	<p>The <i>MIGRANTS</i> residents: Those who come from surrounding villages outside the Nusantara development area. Migrants will potentially have disadvantages over locals in their same line of work and industry</p>
<p>Governance</p>	<ul style="list-style-type: none"> • There potential for gaps in the governance structure that need to support the integration of migrants moving into the local workforce. Existing policies and programs need to be assessed to address the areas where improvement is needed.
<p>Work and Education</p>	<ul style="list-style-type: none"> • Coupling education and training with environmental development and education is needed across sectors.
<p>Economic</p>	<ul style="list-style-type: none"> • Emphasis on closed competition leaves migrants unable to compete with the local businesses and vice versa. • Concern for the fulfillment of economic needs over environmental needs.
<p>Cultural</p>	<ul style="list-style-type: none"> • Internationalisation and awareness and tendency towards importation of practices and lifestyles. • Less interest on preserving local values. • Modern development images imposing over a landscape of cultural and social norms.
<p>Public participation</p>	<ul style="list-style-type: none"> • Strong focus on building individual communities. • Need to assess how migrants will participate in local community activities for decision making.

Table-7: Characterisation of the images of Nusantara by *migrants*

In general, the community level images that emerged from these analyses show that effective management and development in the region require the involvement and contributions of a diverse number of stakeholders. The locals for residing in sensitive areas possess socio-cultural advantages that can significantly shape the long-term sustainability of the development. Similarly, the communities of migrants, as innovators, could enhance the resilience of the community and build new connections. Both groups will require a unique set of needs to be met as part of the development strategy to help ensure a successful integration empowering locals and migrants to inhabit and build new communities sustainably.

3.2 THE IMAGE OF THE CITY METHOD TESTING THE *GREENSIGHT* FRAMEWORK

The *greensight* framework was used applying the questionnaire method to obtain a sample of the community image. The results collected were in the form of important descriptions of what constitutes contextual elements of the built and the natural environment of people living in the villages of East Kalimantan. In the case of the built environment elements such as the means and type of transport infrastructure played a particular role. Exploring the natural enabling systems layer of *greensight*, the responses made explicit the connections between the residents and non-human elements of their environment such as forests, animals, plants and nature for health and recreation. Gardens were found to be the most significant element connecting residents with their natural environment. Overall, the responses encapsulate the challenges faced by the residents with regards to accessibility and convenience, and at the same time, they help made more explicit the unique characteristics of the villages in the living conditions and daily life experiences of the residents. The following synthesis describes the findings from each group when exploring the elements of the built and natural environments forming the image of their particular village:

Group 1: Students:

While the lack of facilities and the disturbance caused by materials trucks are major drawbacks that suggest potential transportation challenges. The lack of amenities, such as cafes and banks, is a prominent issue that affects the convenience and comfort of living in a village. The presence of cafes, mosques, and a strong community are part of the village's vitality. The tranquillity and distance from big roads is also a contributor to a more serene atmosphere. Distinct elements and landmarks give the village a unique identity, while emotions during trips vary depending on the circumstances. The main purposes of the respondent's daily trips are work and grocery shopping, emphasizing the practical nature of these journeys.

Group 2: Housewives:

The responses from the housewives group portray a village undergoing significant changes. While improvements in infrastructure and services, such as the availability of Infomart and 5G network are appreciated, the increase in traffic, accidents, and dust due to construction is a concern. Emotional responses such as worry and shock reflect the mixed feelings towards these changes. There is curiosity in the residents about the ongoing construction and the transformation of the landscape. The typical activities of the residents involve practical tasks like picking up children from school and shopping, as well as leisurely strolling around. However, these trips are also characterized by various disruptions such as noise from sirens, traffic congestion, and waiting at gas stations. Overall, the village seems to be undergoing rapid growth and development. There are mixed emotions towards the changes while disruptions are faced in daily life as a result of construction and increased traffic. The changes become more evident while reflecting on the physical landscape, daily routines, and the emotions experienced by the residents.

Group 3: Local Civil Servants:

Lack of public transportation, risky road conditions, and reliance on motorcycles highlight the challenges with mobility and transportation. The influx of immigrants and potential for tourism and business in the village reflect the impact of development on the economic layer. While this brings opportunities for growth, it also highlights the need for infrastructure improvement to support the increasing population and economic activities. Challenges and opportunities for employment, education, and access to essential services still remain. experiences of residents in everyday life are those of living in rather isolated areas undergoing economic transformation. There are positive feelings strongly linked to the natural environment such as the presence of trees and forests that give a sense of pride and attachment to the surroundings. This underscores the importance of preserving and protecting the village's ecological resources while pursuing development.

Group 4: Migrant SMEs

Residents are connected to nature through their occupation and express positive feelings towards nature and forest, associating them with freshness, coolness, and beauty. Their connection with nature extends beyond their occupation, they have a home garden and engage in farming, gardening and other nature activities that make part of their everyday life satisfaction

They also acknowledge the negative consequences of land clearing, which cause concerns about job security and future livelihood. Despite some disappointment in the current state of nature, the interviewee still considers it necessary and important, particularly for air quality. Financial motivations also highlight the direct impact of nature on their wealth generation; however, residents also reinforced the economic importance of a thriving natural ecosystem. Residents show a strong dependency on nature for their livelihood, as well as their appreciation for its beauty and the happiness it brings. The concerns about land clearing and the financial motivation behind the connection with nature emerged as significant insights.

Group 5: Local Civil Servants

A slow pace, inadequate infrastructure, and traffic issues constitute the image of their village for this group. The absence of proper public transportation further restricts mobility in the area. Positive aspects such as the friendly atmosphere and the availability of jobs show that despite the challenges, there are still some strengths in the community. Results highlight the need for infrastructure development and improvements in the village, particularly in terms of road conditions, traffic management, and public transportation.

Group 6: Local SMEs

The government's assistance in improving road infrastructure and transportation accessibility has had a positive impact. Observations during their daily trips show the transformation of previously damaged roads and the increasing focus on monitored construction. Local SMEs value the ecosystem services that the surrounding natural environment could bring positioning Nusantara as a forest city. There is also an evident focus on economic development and on seeking knowledge. The potential for agricultural development is noted, and the overall purpose of the trips mentioned is to improve quality of life. Overall, the emphasis is on improving infrastructure and on natural environment preservation.



Image 12: Group 3, local civil servants during group work with the greensight framework

3. RECOMMENDATIONS

Planning for sustainable urban futures in today's globalized world is a non-linear, dynamic and difficult task. On the one hand, sensitivities across countries and geographies indicate that the future of some cities appears more vulnerable than others to wars, impacts from a changing climate, the displacement of local citizens, migration, and to population increase that is expected to be particularly higher in the Asian and African continents. On the other hand, the fast pace and deployment of technology and digitalization is merging with economic, social and environmental priorities leaving less room for understanding the differences and nuances that planning a city in the 21st century entails and suggesting that we can have a global uniform approach to planning.

The following recommendations are provided with the idea to add dimension to the planning of sustainable futures in transforming urban development initiatives globally:

- **Different urban contexts wil lead to different scenarios:** When considering context, urban planning faces a challenge with executing and transferring concepts and principles that work in more developed countries and not in less developed and more vulnerable urban/rural environments. Development is and is not a unifier even though many locals perceived Nusantara as a way of connecting isolated and disperse areas with unpaved roads into better road infrastructure and town planning.
- **Focus on the environmental image:** The development of Nusantara holds significant potential for generating numerous opportunities and fostering both economic and social advancement within the region. However, it remains less clear how strategic decisions that consider social, economic, and cultural dimensions incorporate the environmental layer of sustainable development. It appears that sustainability aspects are less of a concern when studying the perceptions of both local residents and migrants who are anticipated to inhabit the new capital. Emphasizing the local environmental landscape is crucial for using existing knowledge to bridge the gaps in sustainability management and for facilitating informed decision-making for the long term.
- **Urban development as a transformation:** The urban strategies for Nusantara should present a strong holistic framework and solutions for addressing the regional transformation from a village to a national capital city. This transformation from a rural village to a major city is already being perceived to increase inequalities, impacting the local culture, economy, and society at large. The rural context with its social, cultural, and demographic histories, should not be underestimated in the pursuit of building a modern city. The vision of a world city with economic advantages derived from external knowledge and foreign conditions should seek to align with local realities and standards of potentially adverse in-situ transformations.

3. CONCLUSIONS

Indonesia's new capital city aims to transform development, opening up a range of possible futures. The implications of this change for cultural diversity, the environment, and society at large are manifold and are likely to significantly alter the landscape of the region in the years to come.

This study aimed to apply foresight approaches, methods, and tools to explore the new capital city landscape undergoing change by focusing on the stakeholders' perceptions and expectations that connect to subjective wellbeing (happiness). We approached this task through the concept of images of the future, first to understand the subjective images held by the locals, and second, to explore how context relates to those images. Futurists who have studied images of the future have found that they play an important role in influencing the actions people take to fulfill their ideal future (Polak, 1973), (Bell, 2017), (Mau, 1968), (Rubin, 2013). From the perspective of happiness, research shows that, like the images we hold, happiness is contextual (Dolan, 2015). What we intended with this foresight process was to examine the diverse contexts that might influence and shape distinctive images held in the mind of residents and identify some key elements in people's preferences in relation to their direct environments.

In general, the image of Nusantara was mainly positive and perceived as a significant milestone and resource that could ultimately provide employment opportunities, attract economic development, and promote social well-being in the rural villages driven primarily by farming. It is worth noting a sense of idealism and unity which emerged from the local rural context of isolated and dispersed villages, unpaved roads, and minimal infrastructure. Nevertheless, the absence of more holistic approaches to community integration remains a weak link in the process.

The significance of this research is in connecting foresight approaches with stakeholders' perceptions emphasising the significance of context in subjective wellbeing (happiness). As futurists, we are concerned with the long-term consequences of decisions made in the present. With this report and focus on the significance of images of the future, this exploration is a first glimpse at the implications in planning highly transformative urban/rural landscapes. By implementing this foresight process, we were able to come closer to seeing through with new lenses how our environment might have an effect in the images we produce and the environment we perceive, at times more tangible for some while at the same time more ambiguous for others. This work was intended as the initial step in a more extensive line of inquiry where images of the future could be integrated further for the purpose of creating more just and sustainable urban environments.

3. APPENDICES

Appendix A: List of Notetakers and Facilitators

Table-8: List of notetakers and facilitators per group:

Group Number	Affiliation	Names	Occupation	Area /Town
1–Students	Universitas Mulawarman	Fatima Ramadhanty Rahmat, S.T. / Dharwati Pratama Sari, M.Sc.	Graduate/Lecturer	Samarinda, East Kalimantan
2–Housewives	Universitas Mulawarman	Intan Baiduri / Resty Intan Putri, Master of Engineering	Student/Lecturer	Samarinda, East Kalimantan
3–Local Civil Servants	Universitas Mulawarman	Jeva Adelia Nanda Baihaki / Nur Asriatul Kholifah, M.Sc.	Student/Lecturer	Samarinda, East Kalimantan
4–Migrants Traders and SMEs	Universitas Mulawarman	Hana Gloria Ford Hutagulung / Tantra Diwa Larasati, M.T.	Student/Lecturer	Bontang, East Kalimantan
5–Migrants Civil Servants	Universitas Mulawarman	Muhammad Reza Saputra / Muhammad Rizqy Septyandy, M.Sc.	Student/Lecturer	Samarinda, East Kalimantan
6–Locals Traders and SMEs	Universitas Mulawarman	Daytrich Raynald / Ahmad Moh. Nur, M.T.	Student/Lecturer	Samarinda, East Kalimantan

Appendix B: Jakarta Journal

Jakarta, March 1, 2024:

A taxi ride from the airport to central Jakarta brings me to my first encounter with this capital city. The city stirs in me contradictory thoughts of wonder and decay. Decay in the city's infrastructure; in the old and bare structures, the seemingly ending number of townhouses and semi-detached homes, some partly built and some partly unbuilt, most of them out of concrete and looking unfinished without any paint or colour. In the far distance, protruding minarets emerge tall and iconic marking a stark contrast against a dense landscape encroached by a highly informal type of development. Passing through some of the neighbourhoods, the sight from my window shows canals of black water clogged with waste that has been dumped on the edges of them, perhaps by the locals. My sense of wonder is about the way people move and don't move, is about the traffic congestion and the excessive number of motorcycles that no longer help people and traffic to flow but rather give the impression of chaos and an inefficient form mobilization of humans. Our hunter gatherers may have moved way more efficiently, I think.

My perception of Jakarta is that of a devaluated city, same as the Indonesian currency, devaluated in its indifference for the design elements essential to a healthy environment where people can live; devaluated basically in the poor aesthetic value. I am scratching my head thinking how things could go so wrong in some cities of the world? My taxi ride took a little under two hours to arrive to my hotel and however long and bizarre it was, the experience left me to reflect on the notion of time. What is the value of time in a city like Jakarta? The capital is progressively sinking, but what is that have to do with time? If the future of Jakarta is to be rooted in its present with knowledge of the past, what would it take for the city to shift and build a new path? Futures thinking is undoubtedly needed but how futures knowledge is applied at this stage of urban decay is perhaps the biggest challenge. A systems approach to problem solving will require an intervention from within but that might pose to be merely unrealistic.

Jakarta, March 7, 2024:

Upon my return from a 4-day week of workshops in East Kalimantan, my image of central Jakarta evolved into that of a green city centre as I have observed the many tropical green plants and parks that are spread all around. A system of highways connects the centre of Jakarta giving a two-dimensional perspective of the city, one above ground where the speed is faster and seemingly smooth, and one at ground level where the roads are narrow, the streets are crowded and the dense urban fabric makes it if not impossible, extremely time-consuming for cars and pedestrians to move through. There is an air of dystopia in the absence of a cohesive form or idea for how to build the city, form does not follow function it appears, in Jakarta.

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