

Project Proposal¹

Reporting details:	
Project title	Land Suitability Research for Women-friendly Housing
Name of Champion/s	Aesya Nida Avrila
Project Start date	July 2022
Project End date (3-6 month project)	January 2023
Target Budget (up to \$5000)	\$4,805.45
Location (Region, Country, City/Municipality)	Bandung Wetan, Bandung
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¹ Template is customized from [HOT ESA Grants Qualitative Report Template](#) and [Tools4Dev ConceptNote Template](#)

1. Background

Describe the nature of the social problem and data problem your project addressed; include who was / is being affected. Support with data when possible

As a city with the 3rd largest status in Indonesia, Bandung has challenges in increasing the population in Bandung which is caused by many factors, such as high mobility, migrants who settle and start life in this city, so that fertility is quite difficult to control. Coupled with the culture shock conditions, several problems arise that can be outlined. These include the challenge of getting a peaceful social life, and the challenge of choosing a comfortable and safe residence. These two factors are very fatal for every resident because even though these two things are often considered trivial, the fact is that where you live and social life will have a big influence on many other aspects of life, such as career, finance, education, and mental health. Challenges in social life that often arise are violence, moral crises, and sexual harassment, especially for women. Although it is often voiced regarding women's human rights and efforts to build women's courage in speaking out regarding incidents of violence and harassment that have happened to them, this for us should be further refined by having facilities that can receive real-time location reports so that they become information. which is useful for other women to be more careful in areas where tragedy has occurred.

Meanwhile, the challenge in choosing housing is that the procurement and selection of housing alone is not enough. The availability of massive amounts of information about housing far from disaster-prone and conflict-prone locations, harmonious neighbors, tolerant household communities, and a positive environment are needed to support women's rights, especially to be able to live safely and comfortably. For this reason, this research has the main objective of providing data in the form of a WebGIS that is easily accessible by every woman in the Bandung Wetan District which provides various features in accordance with the two points above: supporting women's security in social life, and ease of accessing safe and comfortable residential data, especially for women.

2. Target Results (Objectives)

- **Impact Area(s)**

Long-term, project aims to contribute to:

- Sustainable cities and communities
- Regional planning

- **Project Target Outcomes**

By the end of the project, the project will achieve the following:

- *Creating an environment that is livable and of course safe and comfortable for the community, especially for women.*
- *Creating awareness in every community in the study area regarding women's human rights, especially the right to have a safe and comfortable shelter and social life.*
- *Regularity in regional planning in accordance with regulations*

- **Project Target Outputs**

By the end of the project, the project will deliver the following:

- *OSM training and digitization of over 1,000,000 buildings and data updates. This training was attended by 10 participants from Geography Department students, Padang State University with the number of buildings built reaching more than 1,000,000 (especially at the research site), complete with data about the building, such as type of building, height, number of floors, and so on. This data will be very useful to add to the OSM data as a data source and the research team will use the data for further analysis.*
- *Participate in women's opinions and desires to create research parameters. Survey results from forms regarding comfortable housing for women. With three groups of forms that are distinguished based on the degree of importance. There are three degrees of importance, namely very important, important, and less important. Parameters with a degree of importance of Very Important will be taken from the results of the survey form as much as 75 percent. Parameters with a degree of importance will be taken from the survey form by 50 percent, and a degree of less importance will be taken from the survey form by 25 percent. The survey targets are women with an age range of 15 to 63 years (productive age) at the study site. The survey results from this sample can later be used by other researchers who want to research related topics.*
- *Multifunctional interactive webGIS, especially for women. The features that will be provided by WebGIS are the results of research on the previous point, comfortable and safe housing, especially for women, situation of awareness at every corner of the research location related to locations prone to tragedies such as sexual harassment, to the location of female-friendly facilities such as hangouts, shopping malls, gymnasiums, etc.*

Solution

Describe how the project contributes to solving the social problem/data problem. If possible, include the number of people expected to benefit from the project.

The right to adequate housing is an inherent right of humans get a house / place to live The ideal housing location is with a comfortable and safe living environment both physically and socially. As this project also focuses on land suitability research for women-friendly housing, the availability of large amounts of information on housing far from disaster-prone and conflict-prone locations, where people will live in housing that is less noisy, polluted, and dangerous. as well as creating harmonious neighbors, equal and non- discrimination access to enjoy the right to housing, tolerant household communities, creation of the right to choose a place to live and to move freely, and a positive environment is urgently needed to support women's rights, especially to be able to live safely and comfortably.

The data that will be used later is data from stakeholders and survey results from forms regarding comfortable housing for women in the project area. The data processing will be processed using the fuzzy method to get the best results. It is hoped that later this map and WebGIS can help to fulfill the realization of decent housing in addition to availability is affordability meaning that the housing obtained must be affordable without fulfillment of other basic needs, accessibility which requires residence and its environm must be accessible and useful for everyone and can help to find women-friendly residential locations and make it easier for the community to know the criteria for the land to be occupied. Support women's security in social life, and easy access to safe and secure housing data. In addition, it will also help the government to use this as a policy reference.

3. Data Use

Describe how the data you generate is intended to be used. How will the data that you collect change / influence the data user's work?

As a first step, the researcher used the latest available OSM data for the Bandung Wetan area. Then, the data obtained from surveys and mapping at the research site will be the raw data to be updated and digitized by the training participants. Data from the form that has been filled out by the sample (women in Bandung Wetan) is used as part of the determining parameter. The updated OSM data and the obtained parameters will later be analyzed to find women-friendly residential areas and presented in the form of a WebGIS. In addition to the main features, the next feature also supports women's security in social life, and easy access to data about safe and comfortable housing, especially for women. The resulting WebGIS will have main features such as displaying data on women-friendly residential locations (complete with visualization of attribute data), displaying survey data on a sample of their opinions about what affects their level of comfort in social life and living, so that they are able to perform an analysis that users want (such as the level of security and comfort of the user's residential location), to be able to display locations that are not women-friendly in Bandung Wetan. So that the results of the data obtained can be useful for the community, especially women, the government in further planning for better and socially sustainable settlement governance, etc. It is hoped that this WebGIS data will be compiled periodically so that the data presented is up to date. and legal. And can be continued for all regions in Indonesia.

4. Activities

Activity Title	Activity Type	Activity Dates	Target Participants (if relevant)
<i>Setting up Project Tasks (collecting and verifying field data in the project region)</i>	<i>Material Development</i>	<i>1 - 20 July 2022</i>	<i>3 Person</i>
<i>Coordination meeting with participant</i>	<i>Material Development Focus Group Discussion</i>	<i>15 - 31 August 2022</i>	<i>13 Person</i>
<i>Training OSM and GIS</i>	<i>Training</i>	<i>5 - 30 September 2022</i>	<i>10 Person</i>
<i>Processing Data to Make a Map</i>	<i>Mapping</i>		
<i>Creating WebGIS for synced maps</i>	<i>Mapping</i>	<i>3 October - 31 November 2022</i>	<i>3 Person</i>
<i>Validation Data</i>	<i>Others</i>	<i>5 - 23 December 2022</i>	<i>10 Person</i>
<i>Closing and Reporting</i>	<i>Others</i>	<i>9 - 30 January 2023</i>	<i>10 Person</i>

Activity Type: Training, Mapping, Material Development, Others

5. People & Partners

List partners, their roles and contact details.

Partner - Government

- Badan Pertanahan Nasional as a government ministry agencies in Indonesia that has the task of carrying out government duties in the land sector in accordance with the provisions of laws and regulations and as a provider of land map data.
- Dinas PUPR Provinsi/Kota as an institution in charge of public works and public housing affairs and a provider of data in the form of maps and geospatials.
- Dinas Kehutanan is a agency as forestry management, covering forest management, conservation of natural resources, and management of watersheds. and as a data provider in the form of maps.
- Badan Perencanaan Daerah as a regional technical institution in the field of research and development planning.

Partner - OSM Community

- OSM Indonesia as a provider of the use of open geospatial data for sustainable development and human resource capacity building.

Partner - Others (Academic and Technician)

- Some Geography Students of *Universitas Negeri Padang*, as a participant to mapping project region.
- GIS Analyst as a potential partner who is able to present spatial information for the mapping.
- GIS Developer is a software engineer to assist in organizing and executing the activities required to design and build applications to support Geographic Information System (GIS) data.

6. Sustainability

Briefly describe how the project benefits will be sustained after HOT support ends. How will the lessons learned be shared in the community? How will the benefits be expanded?

The data obtained can be useful for people who want to know the ideal residential location for general and specific user criteria (in this case women); can be used by local government in planning, relocation, and evaluation; until the next researchers who want to research related topics. It is hoped that later this WebGIS data will be compiled periodically so that the data presented is up to date and valid. Because the purpose of this research is real-time and continuous, it is very demanding to update the data.

7. Relevance

Relevance in relation to the three points listed in 'The Purpose' section

This project which is a Mapping and WebGIS regarding the ideal potential for housing is related to the first objective of engagement or training or deepening that improves map data or access to map data. Second, mapping activities that contribute to improving life in the community and contributing to improvement. And lastly, this project is a project that has the potential to be replicated, improved, and sustainable in the selection process.

Relevance to this 3 points:

1. The project should contribute to the growth of the OSM movement in the region as well as your growth as a leader in the OSM movement.
2. The project(s) should be related to:
 - a. Working with local communities in addressing their challenges or advancing their goals through OSM data and tools

- b. Engagement or training sessions or immersion that increase map data or access to map data
 - c. Mapping activities that contribute to the improvement of lives in your community or contribute to the betterment of your field
3. Projects with a potential for replication, scale-up and sustainability merits in the selection process

Annex 1: Project Timeline (Gantt Chart)

No.	Task	Lead	Start Date	End Date	Month	July				August				September				October				November				December				January			
					Week	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
1	Preliminary Preparations		Jul 1, 2022	Aug 31, 2022																													
	Downloading of Funds																																
	Identification of Project Managers																																
	Setting up Project Tasks																																
	Collecting and preliminary data validation																																
	Forum Group Discussion																																
	Setting up for Documentation Forms and Reporting Mechanisms																																
	Documentary Requirements from Stakeholders																																
Preliminary Training for Project Management																																	
2	Training and Data Creation		Sep 1, 2022	Nov 30, 2022																													
	Training and Mapping by participant																																
	Validation Training																																
	Creating Webmaps for synced maps																																
3	Validation Project		Dec 1, 2022	Dec 31, 2022																													
4	Closing and Reporting		Jan 1, 2023	Jan 31, 2023																													

Annex 2: Budget

What do you plan to spend the money on?		Budget				
		Rate	Unit	Quantity Desc	Total Cost	Why is need it?
Web Development						
a.	Hosting & Developing	\$ 19.17	12	Month	\$ 230.04	Fee for hosting and developing the web
b.	IT Maintenance	\$ 11.28	12	Month	\$ 103.20	Estimated accommodation for WebSITE maintenance per month by team
c.	Invesment for IT Officer	\$ 616.01	1	Package	\$ 616.01	Fullstack Web Development Training Courses and Investment/Fee for consultation and creating the WebGIS
d.	Documentation (Photographer & Videographer)	-	-	-	-	Worked by the entire core team
Sub Total						949.25
Training and Mapping						
a.	Certificate Printing (Completion)	\$ 2.08	10	Unit	\$ 20.80	Certificate for participants who have completed training with a certain number of attendance
b.	Certificate Printing (Excellence)	\$ 2.08	10	Unit	\$ 20.80	Print certificates for participants who have completed the training and have completed the final assignment
c.	Prize and reward for Partisipants	\$ 62.29	10	Person	\$ 622.90	Prizes for participants who have completed the training and completed the task of inputting data to OSM
d.	Souvenirs for Partnership	\$ 343.90	1	Unit	\$ 343.90	Symbolic souvenirs given by tin from OSM to the participant in charge of the department
Sub Total						1,008.40
Equipment, Online, and Digital Costs						
a.	Internet Connection	\$ 43.26	6	Month	\$ 259.56	Internet connection that will be used by team members with in 6 months, such as analysis, designing WebGIS, to uploading research files
b.	Zoom Meeting Unlimited Account	\$ 12.46	1	Unit	\$ 12.46	Zoom Meeting used for online conditions during training for participants
Sub Total						272.02
Transportation and accommodation						
a.	Air Transportation to Project Region	\$ 107.98	6	Package	\$ 647.88	Round-trip airplanes to project region (Padang - Bandung)
b.	Round trip bus ticket (Padang) - Leader	\$ 27.00	2	Package	\$ 54.00	Because the location of team members is different, it has different details per team member
c.	Round trip bus ticket (Padang) - GIS Developer	\$ 20.28	2	Package	\$ 40.56	
d.	Round trip bus ticket (Padang) - GIS Analyst	\$ 6.98	2	Package	\$ 13.96	
e.	Roundtrip Airport Transfer (Bandung)	\$ 15.30	6	Package	\$ 91.80	To reduce costs when using a plane that goes directly to Bandung, the team decided to use a plane to Jakarta, then use land transportation services to Bandung City.
f.	Roundtrip Airport Transfer (Padang)	\$ 9.00	2	Package	\$ 18.00	Transportation from lodging locations in Padang to the airport (and vice versa)
g.	Transportation (Bandung)	-	-	-	\$ 193.80	Transportation costs during survey and research in Bandung
h.	Transportation (Padang)	-	-	-	\$ 20.80	Transportation costs during the training in Padang
i.	Lodging (Bandung)	\$ 45.00	14	Day	\$ 630.00	To cover the complete cost housing
j.	Lodging (Padang)	\$ 27.00	5	Day	\$ 135.00	
k.	Meal Allowance (Bandung)	\$ 20.07	14	Day	\$ 280.98	To cover the cost of a complete meal
l.	Meal Allowance (Padang)	\$ 20.07	5	Day	\$ 100.35	
Sub Total						2,227.13
Overhead Cost (15 Persen)						
Sub Total						626.80
Total						4,805.45