

Mine the Gap

Training Manual 2018

Towards **safe, resilient** and
sustainable life of local people



UNIVERSITÉ
DE GENÈVE

FACULTÉ DES SCIENCES
DE LA SOCIÉTÉ

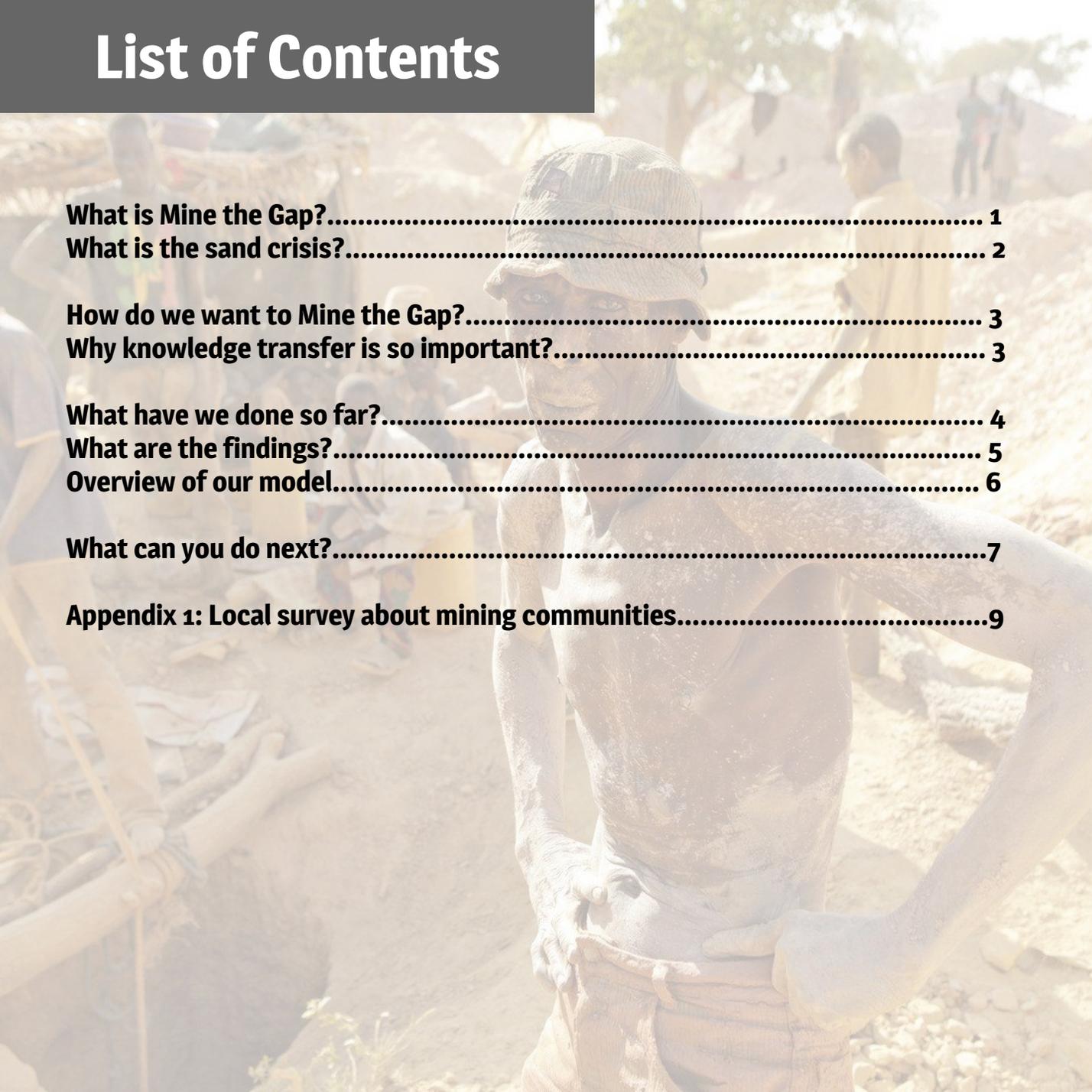


GENEVA
TSINGHUA
INITIATIVE

for the Sustainable Development Goals

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What is Mind the Gap?

Mine the Gap is a project founded in 2018 by a group of students from **Université de Genève**, in order to seek **bottom-up** solutions and alternatives for **local communities affected by mining activities**, especially sand and gravel.

The purpose of this manual **is to provide guidelines for actors who are willing to take actions towards safe, resilient and sustainable life of local people** affected by mining. For instance, actors can be local leaders, academia, civil society groups, IOs, private sectors, etc.



What is the sand crisis?



Marine, beach and river sand are **limited** natural resources. Sand is **depleting** at rapid level because of skyrocketing demand.

Indiscriminate extraction of sand has serious **environmental, social, economic and geopolitical impacts.**



Sand is used to **make essential things in everyday life** - glasses, bridges, food, roads, toothpastes, buildings, airplanes, computer chips, cameras, TVs, bottles, paints, car engines, cosmetics, paper, plastics, etc.



Local people are involved in sand extraction activities due to lack of other **socio-economic opportunities and environmental awareness.**

The main driver of this crisis is our era's **unprecedented urban growth.** Cities are expanding at a pace and on a scale far greater than at **any time in human history.**



How do we want to Mine the Gap?

By creating a **global network** for **knowledge transfer** between communities affected by various mining activities and organizations that work at **local level**, in order to implement bottom-up **alternative livelihoods and/or best sustainable mining** projects.

Why knowledge transfer is so important?



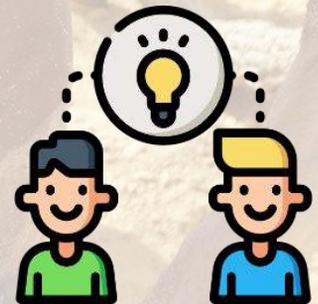
Enable **local communities** to tackle sand mining issue by sharing **technical skills and information**



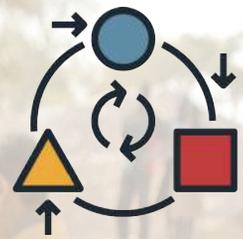
Facilitates **cooperation** regarding alternative livelihoods and best practices among local communities affected by mining industries worldwide



Promotes **official and legal representation** of local people affected by sand mining on local, regional, national, and global levels



What have we done so far?



We have developed a number of actions and a series of tools in order to tackle negative impacts of mining sectors:

- ✓ Conducted **extensive research** on the issue, identification of main drivers and impacts of mining activities and local communities participation on it
- ✓ Contacted different **actors** relevant to the topic: academia, private businesses, NGOs and field experts
- ✓ **Mapped local communities** affected by mining-related activities and made distinctions between communities with alternatives and without
- ✓ Developed the **Coincidence Rate** approach, in order to identify similarities between communities and promote knowledge transfer between communities that have one solution and communities that have another solution
- ✓ Created a **Local Survey for Mining Communities** in order to gather quality information about local people's situations at field level

What are the findings?



Alternative Livelihoods

- ✓ Develop agricultural diversification programs to strengthen affected families' sources of incomes (Peru – gold mining)
- ✓ Provide new skills and knowledge on enhancing financial capital and management (Ghana – gold mining)

Best Sustainable Mining

- ✓ Establish school gardens and raise children's awareness of their rights and risks related to mining activities (Peru – gold mining)
- ✓ Allow Local Environmental Justice Organizations (EJOs) to ask for applications of local regulations by local authorities (Sri Lanka – sand and gravel mining)
- ✓ Prohibit mechanized sand mining under the National Environmental Act 47 1980 (Sri Lanka – sand and gravel mining)
- ✓ Regularize mining activities, restore degraded areas, monitor illegal mining and effluent discharges, while harvesting river sand in a sustainable manner (Maha Oya River Management Plan)

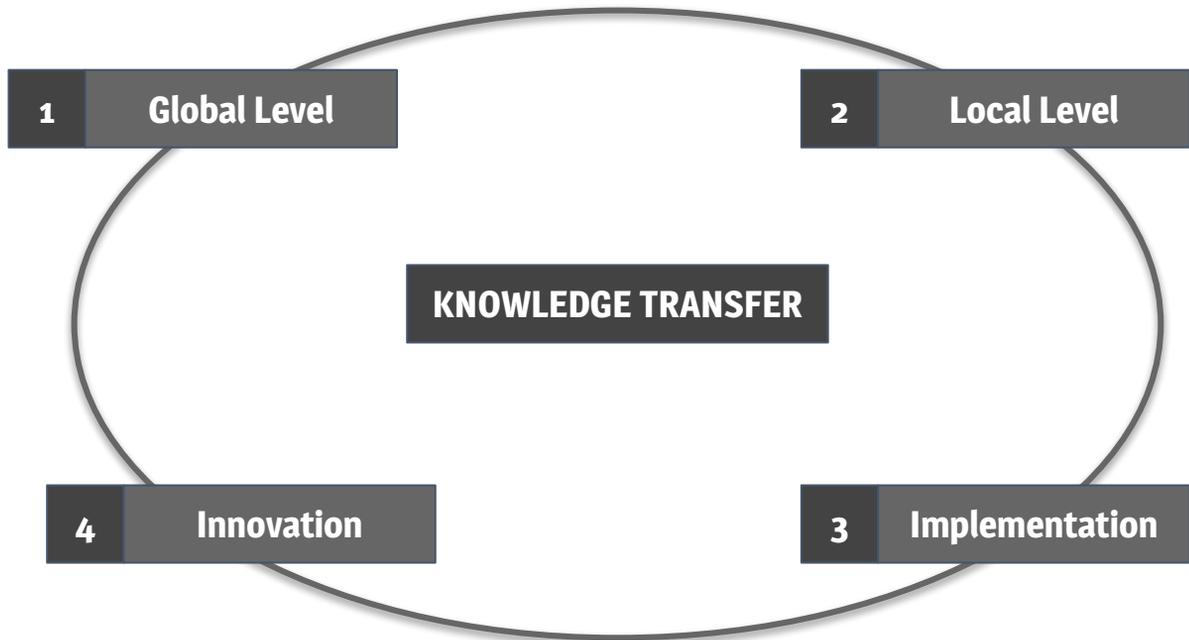
Overview of our model



Assessment of communities worldwide and classify their problems and solutions



Match communities with similar drivers and impacts in order to implement alternative projects



Local innovation processes turn into new alternatives to add on our map



Adaptation of alternatives found according to local circumstances and step into action

What can you do next?

Step 1: Conduct Local Survey about Mining Communities with “Dialogue” approach

Local survey is a **bottom-up data collection instrument**, which is designed to be used at local level using dialogue. For all the actors using this local survey, there are two indispensable elements to keep in mind:

First, local survey is a **mixture of qualitative and quantitative research methods**. Therefore, in case one question has overlapping answers with other questions, actors conducting the survey are encouraged to use their own discretion.

Second, while conducting the surveys, actors are required to use the “dialogue” method. It is understood as a multi-sided procedure which looks beyond common notions of conversational exchange and parlance. The aim of engaging in **dialogue is to suspend one’s judgments and allow oneself to listen to others’ opinions in order to see what they truly mean**. This implies that the actors cannot make any presumptions about situations of local people without engaging in genuine dialogue. In the end, this method can facilitate actors **to engage with local communities on a deeper level to understand their needs, difficulties, values, visions, and hopes from the local people’s perspectives**.

Third, actors are recommended to make recordings of interviews with written permissions from each local person interviewed. This is solely intended for documentation purposes, that will enable thorough qualitative and quantitative analyses. However, no recordings can be executed without written permissions.

What can you do next?

Step 2: General diagnosis of the communities with regard to different dimensions of the survey

Step 3: Develop indices based on the general diagnosis
Labour Index, Index of Expenditure and Savings, Index of Household Income, Health Index, Index of Education, Index of Capacities, Index of Community Engagement, Index of Mining Impacts, Index of Environmental awareness

Step 4: Decide thresholds for all the indices
Decide thresholds for all the indices by three categories: Low- Medium - High, between 0 and 1 with normalized values for clear comparison.

Step 5: Match the communities with similar thresholds of each index using Excel, which is known as the Coincidence Rate

Step 6: Analyze the Coincidence Rate by incorporating all the results from indices

Step 7: Develop a global network sharing Alternative Livelihoods and Best Sustainable Mining Practices, according to the researched similarities

Step 8: On the basis of results obtained, it is expected that the planning Alternative Livelihoods and Best Sustainable Mining Practices can be improved on a practical level

Appendix: Local Survey about Mining Communities

2 PERSONAL BACKGROUND

2.1 _____
NAME AND SURNAME

2.2 / /
BIRTH DATE

2.3 _____
PLACE OF BIRTH

2.4 Gender

Male

Female

Other

2.5 Since when are you living in this community?
Mention year:

2.6 Why did you decide to come and live here?

Work opportunities

Family relocation

Displacement

Other:

2.7 How far do you live from mining extractive areas?

0-500 m 1001 - 1500 m Above 2000 m

501 - 1000 m 1501 - 2000 m

3 LABOR BACKGROUND

3.1 Do you have a job?

Yes (to 3.2) No (to section 4)

If yes, to 3.1

3.2 Are you working in mining-related activities?

Yes (to 3.3) No (to 3.20)

If yes, to 3.2

3.3 Since when are you working in mining related activities?
Mention year:

Appendix: Local Survey about Mining Communities

3-4 What is employment status?

- Self-employed
- Private institution
- Public institution
- Informal sector
- Other:

3-5 How many hours do you work per week?

- 0 - 5 hs
- 6 - 10 hs
- 11 - 15 hs
- 15 - 25 hs
- Above 25 hs

3-6 What are your duties/role/position?

3-7 How often do you receive a payment for this activity?

- Daily
- Weekly
- Every 2 weeks
- Monthly
- Other:

3-8 Approximately, how much are you paid each time?

Local currency:

Later, equivalent in USD:

3-9 What is the payment method?

- Cash
- Bank transfer
- Other:

3-10 Is this the main income from your household?

- Yes
- No

3-11 Does the remuneration you obtain from mining satisfy your needs?

- Yes
- No

3-12 Are there any other sources of income in your household?

- Yes
- No

3-13 If yes, to 3.12. What are the other sources of income?

3-14 How often do you go to work?

Days

- Every day
- From monday to friday
- Only on weekend
- Some days of the week. How many?

Time

- Morning
- Afternoon
- Night
- Overnight

Appendix: Local Survey about Mining Communities

3-15 Mention positive aspects of working in a mining related activity?

3-16 Mention negative aspects of working in a mining related activity?

3-17 What is your level of satisfaction for working in mining-related activities?

- Very satisfied
- Satisfied
- Not sure
- Unsatisfied
- Very unsatisfied

3-18 Do you have experience in any other kind of economic activity?

- Yes
- No

3-19 If yes, to 3.18.

Which?

When?

For how long?

If not, to 3.2

3-20 Are you owner of the business or employed by another person/business/institution?

If owner

In which sector?

Do you have employees?

Yes. How many?

No

What are the effects of mining in this economic activity?

- Positive Negative
- Not sure Not relation

If employed by another:

In which sector?

What are your duties/position?

What are the effects of mining in this economic activity?

- Positive Negative
- Not sure Not relation

Appendix: Local Survey about Mining Communities

4

EXPENDITURE AND SAVINGS

4.1 Do you have a bank account?

- Yes
 No

4.2 Are you able to save part of your Income, for future expenditure?

- Yes
 No

4.3 Tick the three options in which you use most of your income?

- | | | |
|-----------------------------------|-------------------------------------|------------------------------------|
| <input type="checkbox"/> Food | <input type="checkbox"/> Investment | <input type="checkbox"/> Health |
| <input type="checkbox"/> Housing | <input type="checkbox"/> Leisure | <input type="checkbox"/> Education |
| <input type="checkbox"/> Services | <input type="checkbox"/> Vacation | <input type="checkbox"/> Other: |
- _____

5

HOUSEHOLD INCOME

5.1 How many members does your household has?

Ask for members names in annex.

5.2 How many are in physically, legally and mentally stable conditions to work?

5.3 How many of them work in mining-related activities?

5.4 How many of them work and earn an income?

5.5 Among these persons, is there any under-aged?

- Yes
 No

5.6 How many are actively looking for a job?

5.7 Approximately, how much is your household's total income per month?

Appendix: Local Survey about Mining Communities

6 HEALTH

6.1 Are you covered by any kind of health insurance?

- Yes
 No

6.2 Have you experienced any health problems related to mining activities?

- Yes
 No

6.3 Has anyone else in your household experienced health problems related to mining activities?

- Yes
 No

6.4 Did you receive any help regarding health from any mining activities related authority?

- Yes
 No

7 EDUCATION AND CAPACITIES BACKGROUND

7.1 What is your level of formal education?

- | | | |
|--|---|--|
| <input type="checkbox"/> Not formal education | <input type="checkbox"/> Incomplete tertiary/university level Specify profession _____ | <input type="checkbox"/> Student primary school |
| <input type="checkbox"/> Incomplete primary school | | <input type="checkbox"/> Student high school |
| <input type="checkbox"/> Completed primary school | <input type="checkbox"/> Complete tertiary/university level Specify profession _____ | <input type="checkbox"/> Student tertiary/university level Specify profession _____ |
| <input type="checkbox"/> Incomplete high school | | |
| <input type="checkbox"/> Completed high school | | |

7.2 Do you have any capacities or technical skills in other sector than mining?

7.3 Do you any have knowledge in ICTs?

- Yes
 No

7.4 Do you use/are familiar with social networks?

- Yes
 No

Appendix: Local Survey about Mining Communities

8 COMMUNITY ENGAGEMENT

8.1 Do you have any responsible role within your community?

Yes

Which?

No

8.2 Do you participate in any community activities?

Yes

Which?

No

8.3 How satisfied are you with the members of your community?

Very satisfied

Satisfied

Not sure

Unsatisfied

Very unsatisfied

8.4 In which of these kind of events would you like to participate?

Community empowerment

Alternative livelihood projects

Best sustainable mining practices

Education activities

Leisure and family

Other:

8.5 Have you ever mobilized to stop mining activities or making them more sustainable?

Yes

When?

No

9 IMPACTS OF MINING AND ENVIRONMENTAL AWARENESS

9.1 What are the positive impacts of mining in your community?

9.2 What are the negative impacts of mining in your community?

Appendix: Local Survey about Mining Communities

9.3 What is your perception on the mining activity?

- Very satisfied Unsatisfied Not sure
 Satisfied Very unsatisfied

10 WILLINGNESS AND FUTURE PROSPECTS

10.1 How satisfied are you with your quality of life?

- Very satisfied
 Satisfied
 Not sure
 Unsatisfied
 Very unsatisfied

10.2 How many hours per week are you willing to spend in other activities?

- Between 0-2 hs
 Between 3-5 hs
 More than 5 hs
 No time for that

10.3 Would you be interested in participating in capacity building programs?

- Yes
 What kind?

 No

11 SOLUTIONS AND ALTERNATIVE DEVELOPMENT

What kind of solutions and alternatives come to your mind in order to achieve sustainable livelihoods and/or best sustainable practices in the mining industry? Specify how important you consider them and feel free to make proposals which not appear in the list.

Alternative livelihoods

| | Very important | Important | Less important | Not important |
|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 11.1 Promotion of ecological and sustainable tourism through partnerships with community members | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.2 Promotion of agriculture commercialization through sustainable practices such as agroforestry | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.3 Education and training programmes in entrepreneurship and alternative professions, services and crafts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.4 Education and training programmes in entrepreneurship and alternative professions, services and crafts | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.5 Education and training programmes in new technologies through the development of spaces dedicated to this area | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.6 Construction of community facilities in order to develop bottom-up community development projects | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.7 Financing programs in order to invest in alternative businesses | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Appendix: Local Survey about Mining Communities

| | Very important | Important | Less important | Not important |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| 11.8 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.9 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.10 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Best sustainable mining practices | | | | |
| 11.11 Implementation of formalization process to small scale mining, issuing permits and licences | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.12 Implementation of programs that promote better working conditions and assure labor rights | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.13 Creation of a union to facilitate communication and representation between mining companies and workers | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.14 Implementation of minimum safety standards and regularize health monitoring by mining companies | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.15 Restrict mining areas and give penalties/sanctions for any environmental damages | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.16 Designate specific areas as national parks or environmentally protected areas to ensure biodiversity and wildlife protection | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.17 Financing programs in order to invest in alternative businesses | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.18 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.19 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11.20 Other _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

END OF SURVEY

Thank you for your time and all the information provided during this interview

Mine the Gap

Contact us!

wecanminethegap@gmail.com



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