# Urban river agriculture project in Kathmandu, Nepal

## A project on youth employment opportunities in changing urban-rural food systems

#### Foodathon 2018, Wageningen - Team Food Accessibility



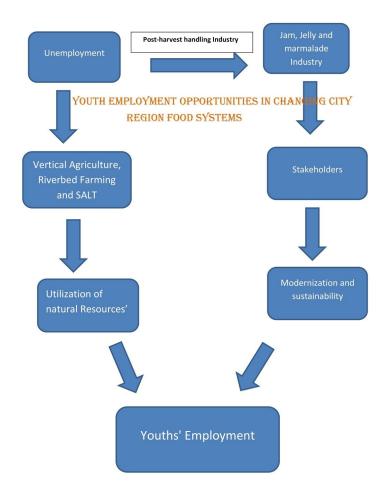
### **INDEX**

1. Overview of the project	3
2. Flow chart of the project	3
3. Objectives of the project	4
4. Description	5
5. Stakeholders involved in the project	6
6. Challenges	6
7. Approaches to solve the problems	7
8. Conclusions	. 8

#### 1. Overview of the project

The project aims to requalify a river region of Kathmandu (Nepal) in order to build a sustainable and inclusive area for food production, targeting the problems of food security, civil inclusion, environmental sustainability and youth unemployment. Therefore it aims at creating both a community-owned space to be cultivated by government-employed citizens and an environmentally sustainable building in which the main trading and educational activities would be developed.

#### 2. Flow chart of the project



#### 3. Objectives of the project

The objectives of this projects are multiple.

First of all, it aims to promote urban horticulture, river bed farming, slope agricultural land technology (SALT) and off season vegetable in the rural areas in order to create more (sustainable) food and employment in the agricultural sector.

Furthermore, the project wants to encourage, as a spin off, the establishment of post handling industries for the preparation of durable, demand-stable products such as Ginger candy, Jam, Jelly and marmalade, as that would create even further levels of youth employment.

Moreover, the project wants to implement a strong market channel and collaborate with the local government and the provinces for technical support

Finally, it aims to reconnect society with food production and sensibilize about sustainability and to emphasize the involvement of women towards agriculture with the promotion of smalls cooperatives that enhance cooperation and helps in the social aspect for proper adoption of the modern technologies

Therefore the main objectives of this projects, will be to reduce (youth, but also general) unemployment and create a sustainable food production network and achieve the Zero Hunger goal. Moreover, it aims to reduce poverty, achieve gender equality, maintain zero hunger, create job opportunities and promote the sustainable and efficient use of environmental and natural resources.

In fact, it will result in the creation of more, easily accessible food stocks, that would help to address food insecurity in the urban context.

Moreover, it will address equality because work will be administered with public calls in which the starting income is considered.

It will therefore fight unemployment while at the same time it would aim to create a better sense of community and forward the idea of sustainability to the next generation with school projects.

#### 4. Description

The project aims to requalify a river region of Kathmandu in order to build a sustainable and inclusive area for food production, targeting the problems of food security, civil inclusion, environmental sustainability and youth unemployment.

It aims to produce sustainable food and connect the civil society to agriculture and food production. In particular, it aims to solve the issue of youth unemployed, as well as the introduction of sustainable food production methods.

For this, the practice of urban horticulture is considered as a method to increase the efficiency of the area, as it could be connected to the soil and water presence naturally provided by a river environment.

The connection with civil society is fundamental, for this, a main building structure would be needed, in which civil society can have meeting to discuss sustainability of the city (food and more) and there could have courses for the schools' kids in order to reconnect people to agriculture from the very early years. Tours for schools and the colleges along with youths who would volunteer can understand how food is made and the importance to live sustainably.

For the urban areas vertical agriculture system are also to be introduced and implemented for a sustainable ecosystem.

Therefore, the project aim to requalify a river area in the city of Kathmandu, Nepal, creating both a community-owned space to be cultivated by government-employed citizens and an environmentally sustainable building in which the main trading and educational activities would be developed. The building would aim to implement a zero impact policy, implementing a water treatment and recycling implant, solar panels for the electricity production and a compost treatment structure for both the wastes of the site and of the building.

Moreover, rooms for the implementation of the school and training project will have to be build, along with free spaces for co-working in which younger generation can easily talk and meet to create new ideas and proposals.

Fundamental in the building will have to be a big main event room in which the assemblies to manage the site will have to be held.

#### 5. Stakeholders involved in the project

For the implementation of this project, coordination among many stakeholders will be required.

First of all, the project would have to involve the city council (including the Province government and the local government) that would have to provide concession for the building sites and the authorizations.

Therefore, constructors and engineers would be required in order to build the site (building plus infrastructure for agriculture).

Moreover, research institutes and university will have to be included, in order to keep track of the progresses of the project and evaluate its results.

Businesses personnel, food processors, distributors and waste managers would have to be connected in order to guarantee the functioning of the production structures.

Finally, the central stakeholders would definitely be young farmers and the civil society, which are the main stakeholders on which the project hinge. The civil society will be a crucial part of the project, as it will be integrated through regular meeting to decide the strategy of the site.

In fact, the hope is that this project could fight the topic of hunger while creating a sense of community that is the first step in receiving the idea of sustainability in our society.

#### 6. Challenges

Various challenges are hereby faced by the youths in day to day life.

Lack of technical knowledge is a concrete problem nowadays.

The lack of youths interested in working in agriculture has been one of the main challenges of this time.

Moreover, improper modernization and inadequate technical knowledge about agricultural techniques (e.g not adequate information on the use of plastic tunnels,

lack of inputs and fertilizers, inadequate use of hydroponics and lack of proper extension facilities) are still some of our major problems.

Moreover the reliance on a subsistence type of agriculture and the low income level of rural regions of the country has lead to high muscle drain, which led to more food insecurity.

#### 7. Approaches to solve the problems

For what concerns the solution to the problems just mentioned, various approaches can be implemented. To organize trainings on new practices can benefit both the youths and post harvest handling.

Along with that, the inclusion of the local government can create a more relevant impact on these issues. For example governments can create subsidies for youth to work in agriculture.

Another solution could be to foster proper labour distribution and resource management could definitely help in increase food production efficiency.

Moreover, to provide adequate attention to community needs and the diverse knowledge systems (included indigenous knowledge of erosion control, farming methods and social sensitivities of the locals) could be on major point in order to ensure food security and environmental sustainability.

Finally, to create a network to make environmental information accessible to farmers, would enable them to be fully aware of the implications of their activities on the environment and to participate more effectively in decision making process on how to solve their environmental challenges.

#### 8. Conclusions

The project is will aim to requalify a region of the city of Kathmandu (Nepal) and to build a sustainable and inclusive area for food production.

It wants to create a community-owned space to be cultivated by government-employed citizens and an environmentally sustainable building in which the main trading and educational activities would be developed.

This project is part of a wider aim to target the problems of food security, civil inclusion, environmental sustainability and youth unemployment, as well as unfair income distribution while fostering community development.