a project of saga
and the community of
Joe Slovo, Port Elizabeth,
South Africa
Developing new forms of productive low-cost housing in peri-urban areas

Joe Slovo
Port Elizabeth, South Africa
Project Brief - February 2018
saga
Created in 2014, saga is a collective of architecture from Nantes, France. United through the same passion about architecture, art and landscape, saga is open to everyone that longs to create new dynamics within those fields. We believe that architecture should overcome its own boundaries, meaning that it needs to come out of its traditional context and slowly become something more universal. For that, we try to get involved in singular contexts, using architecture as tool to shine a light on individual and collective situations. Our tool is the act of building, physically, engaging our bodies and minds in the realization of every project. saga longs to learn by doing, sharing the process with the most, the goal being to experiment new ways to create collectively. The group wants to promote the idea of architecture being a cooperative act involving various fields, the common goal being to create better and meaningful cities. saga wants to share its opportunities with those that rarely have access to it, and in particular students for whom experimentation is essential. Our goal is to act as a platform that can gather a diversity of people and initiatives to create new opportunities. Saga is working step by step, every project being a new fragment of a bigger story.

saga and Joe Slovo
saga, since its inception, has been involved in Joe Slovo, especially through the construction of two facilities within the area (community hall and Silindokuhle preschool). Based on a local initiative, these two projects enabled our team to create a strong relationship with the community of this underprivileged area of Port Elizabeth, South Africa. In 2016, saga also conducted an urban study on Joe Slovo, together with two students from the Ecole d’urbanisme de Paris, in order to better understand the broader context of these projects. This research component was based on a mapping of the area at different scales, along with interviews of inhabitants and local development institutions. Through this research material, we were able to identify different strategies that could be implemented to achieve a greater and more sustainable development of this underprivileged area.

Context
Joe Slovo is a partly informal settlement created in 1995 by a group of urban dwellers previously based in a flooded area in the Port Elizabeth metropolitan area. Its story is singular as the area initially was developed by the inhabitants themselves, through the formation of a Communal Property Association (CPA). From the original squatter camp to the semi formal « RDP » settlement, the area has grown substantially in the past twenty years. Joe Slovo keeps attracting new populations, mostly coming from the nearby rural areas in the hope of finding a better life in the city. In that perspective, Joe Slovo can be considered as a landing area, a transitional space towards integration within the urban system. Sadly, this way of life is still not accessible for everyone in South Africa, and many newcomers end up « trapped » in this transitional area. Globally, Joe Slovo suffers from a vast disconnection with the CBD, both physically (they are situated 25 kilometers apart from each other) and economically (80% of the households live with less than R3500 per month). Despite the vast housing and development program launched by the local government, the situation remains extremely precarious for the community members, who have to develop their very own strategies to survive, in an area where unemployment exceeds 35% of the active population.
For its first project in 2015, saga built together with some inhabitants of Joe Slovo a community hall. The building is made essentially from local recycled material that were collected thanks to nearby industrial companies. The construction was a collective effort with local volunteers and was a pretext for organizing various community events. This project was born thanks to a local initiative: the Silindokuhle Preschool, founded in 2010 by Joe Slovo resident Patricia Piyani.

Program
hall + 2 offices + sanitary

Net area
138 m²

Owner
Love Story (NGO) & Patricia Piyani

Project manager
Architects: Indalo & Collectif Saga

Partners
Alliance Française de Port Elizabeth
Werk, Engineers Without Borders
Nelson Mandela Metropolitan University

Material donation
Williams Hunt
Coca-Cola
Cannibal
Amalloo
Builders Warehouse
Penny Pinchers
IBIS
Voltex

Cost (materials only)
90,000 ZAR
6000 €

Calendar
March / September 2015

In 2016, the team went back to Joe Slovo to build the new Silindokuhle Preschool. The facility, which hosts one hundred children every day, was built collectively in four months with the community members as well as interns and volunteers from France and South Africa. The building is essentially made out of recycled materials collected in nearby industrial sites. Since May 2017, the kids of the Silindokuhle Preschool can attend daycare in a proper learning environment, with three classrooms and a dedicated canteen area.

Program
Preschool for 100 children from 1 to 6 + canteen + sanitary

Net area
220 m²

Owner
Silindokuhle Preschool (NPO) & Patricia Piyani (Principal)

Project manager
Architects: Collectif saga & Uncedo

Partners
Région Pays de la Loire
Département Loire Atlantique
Ville de Nantes
Tavcor Motor Group
Pois Engineering
Paterson Road Investment (PTY)
Clearwater Plumbers
Dyniform

Material donation
Howden Donkin Fans
MPact
Cannibal
Algoa Joinery
Nelson Mandela Bay Municipality
Barloworld Equipment
EPS

Cost (overall budget)
1 300 000 ZAR
85 000 €

Calendar
August 2016 / April 2017

the project is laureate of the Trophée des Associations 2017 of the EDF Fondation
A project based on an existing practice

To pursue its involvement within the Joe Slovo community, saga wishes to start a new project in the area. The proposal wants to acknowledge and support the various existing small scale gardening initiatives in Joe Slovo. As of today, numerous households or community organizations have started vegetable gardens throughout the neighborhood, in order to feed their family as well as making little profit selling the surplus to the community. Additionally, small livestock farming practices are developed all over the precinct. More than just a business, these activities contribute in the uplifting of the area in many ways, including improving nutrition and creating a better living environment.

The project objectives for better living conditions in Joe Slovo:

1. Contribute to environmental preservation
   - Promote permaculture techniques
   - Preservation of water resources
   - Contribute to biodiversity in the area

2. Improve the nutritional quality of the food consumed
   - Produce fresh vegetables within the familial plot
   - Promote a healthier diet, more diverse
   - Promote vegetable gardening within the community

3. Promote economic development of the households through the practice of urban farming
   - Develop effective means to facilitate vegetable gardening
   - Facilitate access for the producers to a broader retail network
   - Strengthen mutual assistance and collaboration within the group of producers

4. Improve the existing housing situation
   - Improve the comfort of the housing units
   - Promote the socio-economic activities currently taking place in the housing units
   - Involve the residents in the process of improving their own house

The project is based on a set of observations made throughout the urban study conducted in 2016 in the area:

- access to food is unequal (prohibitive costs, malnutrition, distance to the nearest shop, …),
- existing farming practices are not well promoted,
- governmental subsidy houses («RDP houses») are not adapted to the households’ needs;
- even though the area is mainly residential, an informal economy network exists and is not being promoted;
- the residents’ knowledge in farming, crafting and construction is not being promoted;
- water resources are not well managed, the situation becoming highly critical (drought);
- the area is arid and needs to be replanted to contribute to biodiversity.

picture: Camille Merimeche
The proposal is based on an intervention on two different, yet interdependent, scales: the first phases will concentrate on the individual plot and the governmental subsidy housing unit while the second step will focus on developing and strengthening the network of resident-producers.

The two actions work closely together:
- **the productive add-ons**, will act as extensions of the original houses AND provide with a space for small scale gardening. The productive add-on is seen as an extra space that can help developing small income generating activities for the household. This extension is directly connected to the individual plot and house, it focuses on the familial unit.

- **the cooperative** is first and foremost a network of resident-producers, the aim being to facilitate access to a broader and fairer distribution network. The cooperative will also act as a ressource center where training can be done, as well as the pooling of equipment, production surplus and various inputs. The cooperative is the heart of the network, it will facilitate the replication of the process throughout the area.

**Main objectives of phase 1:**
- Build 4 prototypes, extensions of the existing houses;
- Bring into cultivation the different prototypes;
- Monitor and evaluate the action with a view to replication.

**Main objectives of phase 2:**
- Federate a network of resident-producers, institutional stakeholders, construction professionals and distributors
- Provide professional training to two teams of volunteers concerning the innovative construction techniques;
- Set up a formal business plan concerning the funding of the productive add-ons, combining a personal contribution (saving group, microcredit), institutional grants / subsidies and other form of support;
- Design of a model for an adaptable, modular, rational and flexible productive add-on;
- Construction of 20 to 40 productive add-ons.

**Main objectives of phase 3:**
- Creation of an association of producers bringing together residents, institutional and retail stakeholders;
- Training of the association’s members in managerial principles for the cooperative;
- Construction of the cooperative building, ressource centre for the producers’ association;
- Set up of a sustainable business plan for the cooperative, aiming self reliance.
First scale of intervention: the house / the plot

The project consists in a hybrid architectural structure that sets as an add-on to the existing housing scheme (governmental subsidy houses). The structure combines:

- a protected space for above ground farming and/or planting. The natural soil being not favorable for culture, a production on an external growth medium is chosen. This technique enables to make the best use of the external inputs as well as to maximize the production space on the relatively small plots (usually between 200 and 300 sqm).

- a surface for rainwater harvesting combined with a storage system to provide watering throughout the year. Water is a real issue for the gardeners: the dry season requires heavy watering, which leads to extra-costs for the households. The roof of the existing houses being insufficient to guarantee a proper yearly water supply, the project suggests increasing its surface by adjoining a new structure. Moreover, considering the critical drought situation in the country, rainwater harvesting solutions urgently need to be implemented.

- an extra living space for the family. The function of this room must be defined with the concerned household according to its need (extra room for a grown up children / external storage / working space / etc.). The current house built by the government offers between 36 and 40 square meters per household, which is often insufficient considering one unit can house between 1 and 8 people at once. Moreover, many people have their own professional business (craftsmanship, hair and beauty salon, old age home, informal preschool, etc.) set up in their own house, which makes the unit often highly unadapted. The project suggests offering an extra space that can therefore adapt to the particular needs of each household.

This structure is referred in this dossier as the « productive add-on ».

As per the previous experiences led by saga, the add-on will be built together with the inhabitants concerned, local students and a construction team (locals) previously trained. This process guarantees a higher level of appropriation once the building finished and enables to provide training to the volunteers. This participative construction also intends to insure that the action can be replicated once finished. Easily accessible and repeatable techniques must be chosen, and a particular attention will be drawn towards the use of traditional / vernacular construction techniques (earth bricks, wattle and daub, thatch, etc.). On top of that, various partnerships will be secured with local industrial companies in order to collect waste materials which can be easily transformed into construction elements. This process allows to bring down the construction costs as well as insure an easy maintenance for the users. A simple efficient modular construction system will be implemented in order to adapt every add-on to its particular plot and household.

As per the previous projects shown earlier in this brief, the actual drawing of the plans for the add-ons will be done once on site, together with the community members involved. It is indeed essential to engage in a prior work with the inhabitants to identify the actual needs and opt for the best suitable option. This process is highly important to insure the project is fully adapted to the real conditions of the family and its environment.

This is why the drawings shown in this brief are only examples of what could be done and not finished products.
Second scale of intervention: the shared facility / the cooperative

The second step of the project consists in the creation and development of a larger network, centered around the ideas of producing and distributing better quality food for everyone. This network is based on the resident-producers but will also involve institutional stakeholders and key players from the construction, training and retail world. In the long term, this network will materialize in a cooperative building, resource centre for the promotion of food gardening in peri-urban areas. The cooperative combines various functions:

- the pooling of production surplus. If each farmer contribute with its own production, the quantity of products can be sufficient to be commercialized within local retail channels. A label should be created in partnership with local resellers to ensure a fair remuneration as well as the promotion of the initiative locally.

- the pooling of resources and means. The heavy equipment can be shared and made available to every participant. The purchase of products can be grouped in order to access lower prices. A resource centre will enable newcomers to be trained to the various production techniques as well as the farmers to improve their practice.

- the processing of some products and direct selling. Some products will be directly transformed in order to increase the selling margins. A retail space will enable the community members and external people to purchased the goods. The retail space will be conveniently located to ensure it is visible for people from outside Joe Slovo (the proximity with the R75 joining Port Elizabeth to Uitenhage can be exploited).

- the creation of community and public spaces. These areas will be open to public and will allow additional activities to take place (meetings, celebrations, group work, etc.)

Harvesting at the community garden Wathint’ Abafazi Wathini’ Imbokotho picture: David Hour

Diagram showing the different (potential) functions of the cooperative

- **Processing**
  to process the products into market-ready, higher value items that can be sold locally

- **Equipment bank**
  to pool heavy equipment, natural inputs and other products required to facilitate home farming

- **Production & experimentation**
  to produce seeds / seedlings and experiment new techniques

- **Pantry**
  to stock the surplus before they get sent into the retail market

- **Retail**
  to sell locally and directly the products

- **Training and community space**
  to train new producers as well as host various public events
Réplication du processus et mise en réseau à l'échelle urbaine

This project aims to be developed and reproduced within the Joe Slovo precinct, as well as within the surrounding areas that show similar socio-economic dynamics. Joe Slovo is one of many neighborhood throughout the country that suffers from both a lack of economic opportunity and a lack of quality housing; the project, if successful, can therefore set a precedent for a national reflection on how to address those issues.

At the same time, the creation of a strong network, bringing together producers, professional and institutional stakeholders, will enable the residents to have a voice within the metropolitan area of Port Elizabeth and therefore contribute to open up the area towards its surrounding.

As of today, only governmental entities and a few NGOs are involved in Joe Slovo, which strongly limits access to new opportunities for the community and therefore contributes to the strong disconnection of the area in regards to the economic heart of the city. The aim of this project is to reach out to new stakeholders and let them take part in the « world » of Joe Slovo; as a way to bring together a wider community that overcomes the frontiers of Joe Slovo and gathers people from different backgrounds, all sharing a part in the realization of a common goal: to promote better living conditions for each and everyone.

"We learned that democracy alone does not bring fundamental change in the life of the poor. The poor needs to be organized to fight, and to ensure that they will benefit from the fruit of democracy."

Eldridge Jerry, activist involved in the formation of Joe Slovo
Recap chart of the project’s objectives and phasing

Phase 1: schedule
Experiment different prototypes of productive add-ons, to improve existing housing units and develop vegetable gardening in the area
april 2018 / may 2019

April / May 2018
- Identifying the beneficiaries (4 volunteer families for the experimental phase);
- Identifying the operational partners and stakeholders;
- Identifying existing practices in the construction and gardening fields.

May / June 2018
- Participative workshops with the beneficiaries to precise the program of each productive add-on;
- Identifying efficient and relevant construction techniques;
- Identifying efficient and relevant gardening techniques to be reemployed.

June / September 2018
- Design of the different add-ons, taking in consideration the previous investigations;
- Technical and financial feasibility for the add-ons;
- Setting up of a monitoring protocol for the experiment.

October 2018
- Construction of 4 prototypes;
- Organization of a design / build workshop with local and French students and residents.

November 2018
- First planting;
- Start of the monitoring process.

January 2019
- Promotion of the experiment, locally and in France, to address new stakeholders;
- Publishing of the first results of the monitoring process.

November 2018 / May 2019
- First harvest;
- End of the monitoring process;
- Publishing of the final results of the experiment.

Objectives of phase 1:
- Build 4 prototypes, extensions of the existing houses;
- Bring into cultivation the different prototypes;
- Monitor and evaluate the action with a view to replication.

### Recap chart of the project's objectives and phasing

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Phase 2 : schedule
Set up a rationalized process for the construction of productive add-ons, with a view to replication at local and national levels
January 2019 / December 2019

First quarter 2019
- Adjustment of the objectives and process with the results of the monitoring of phase 1 ;
- Drawing up of technical and functional specifications concerning:
  - one or various models of family vegetable gardening
  - one or various construction techniques for the productive add-on ;
- Drawing up of technical and financial specifications concerning:
  - a rational process of construction for the productive add-ons
  - a fundraising process for the building of 20 to 40 productive add-ons ;
- Federate local industrial key players around the construction of 20 to 40 productive add-ons
- Federate local agricultural key players around the creation of a producers network (cooperative) ;
- Federate local retail and food industry key players around the creation of a retail network ;
- Federate institutional key players around the project ;
- Federate community members around the project, in order to set up an association of resident-producers which will be the preferred intermediary with the other stakeholders.

Second quarter 2019
- Identification of the 20 to 40 beneficiaries ;
- Professional training of two teams of builders ;
- Permaculture training sessions for the future producers (beneficiaries) ;
- Drawing up of the final technical, financial and functional specifications for the instruction of 20 to 40 productive add-ons
- Design of a model for an adaptable, modular, rational and flexible productive add-on.

Third quarter 2019 / Second quarter 2020
- Start of the construction of the 20 to 40 productive add-ons ;
- First plantations of the productive add-ons ;
- Monitoring of the different projects.

Objectives of phase 2 :
- Federate a network of resident-producers, institutional stakeholders, construction professionals and distributors
- Provide professional training to two teams of volunteers concerning the innovative construction techniques ;
- Set up a formal business plan concerning the funding of the productive add-ons, combining a personal contribution (saving group, microcredit), institutional grants / subsidies and other form of support ;
- Design of a model for an adaptable, modular, rational and flexible productive add-on ;
- Construction of 20 to 40 productive add-ons.

Phase 3 : schedule
Bring together the resident-producers around the cooperative, as the focal point of the network
March 2019 / March 2020

Second quarter 2019
- Creation of an association of producers to manage the future cooperative ;
- Fundraising campaign to build the cooperative ;
- Drawing up of a sustainable financial plan that will aim for self reliance for the cooperative ;
- Drawing up, in close collaboration with all the key players (residents, association of producers, institutional and professional stakeholders) of technical and functional specifications for the cooperative building ;
- Financial and technical feasibility for the cooperative building ;
- Drawing up of the tenders for the construction of the cooperative building.

Third quarter 2019
- Construction of the cooperative building
- Organization of a participative construction process, involving local community members and local and french students ;
- Drawing up of a monitoring protocol ;
- Training of the association concerning the management of the cooperative (stocks, finances, retail, etc.).

Fourth quarter 2019
- Opening ceremony of the cooperative building ;
- Start of the monitoring process.

First quarter 2020
- Publishing of the first results of the monitoring process
- Expansion to new families, growth of the association of resident-producers ;
- Diffusion of the initiative in local and global networks through lectures, exhibitions and publishing.

Objectives of phase 3 :
- Creation of an association of producers bringing together residents, institutional and retail stakeholders ;
- Training of the association’s members in managerial principles for the cooperative ;
- Construction of the cooperative building, resource centre for the producers’ association ;
- Set up of a sustainable business plan for the cooperative, aiming self reliance.
collectif saga

COOP

Developing new forms of productive low-cost housing in peri-urban areas

Joe Slovo

Port Elizabeth, South Africa

Project Brief - February 2018

Pierre Y. Guérin / Camille Sablé / Simon Galland / Sylvain Guitard / Pierre Ciret