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# Paysage Solidaire

# Report



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#### 1. INTRODUCTION AND PROJECT BACKGROUND

"Paysage Solidaire" is a community based greening project that aims to integrate urban agriculture in the Mercier-Hochelaga-Maisonneuve borough of Montreal. The project consists of cultivating fruits and vegetables on underutilized urban spaces with the participation of citizens and community groups. Selected sites are transformed into open public gardens to revalorize, embellish and animate underused urban spaces.

The aim of this action-research project is to regenerate neighborhoods through urban horticulture with the participation of the community. This pilot project is also part of a food chain: with the help of local partners and food security organizations, a portion of the harvest is processed and delivered to a targeted clientele which includes: the elderly, mobility-impaired people, poor families, young people, as well as to collective kitchens.

The objective of this research grant was to foster a knowledge transfer on the use of medicinal and nutritive plants from the South toward the North. In this framework, we invited an expert in Ayurvedic medicine from Sri Lanka who shared his experience with the Montreal community.

## 2. SITE SURVEY (historical and socio-economic)

The Mercier—Hochelaga-Maisonneuve borough is located in the East-end of the Island of Montreal. It is composed of the three following territorial areas: Hochelaga-Maisonneuve, Mercier-Ouest, and Mercier-Est. The total area of this large borough [third biggest of the Island] covers 25.2 km².

#### 2.1 Historical survey

The Mercier—Hochelaga-Maisonneuve borough has been shaped by a number of actors and variables: from the land division imposed by the seigneurial system in the seventeenth and eighteenth centuries, to the port's growing activities and its need for enhanced transportation in the nineteenth century, to industries' thirst for manpower, energy and raw materials. This borough has also faced periods of slow down.

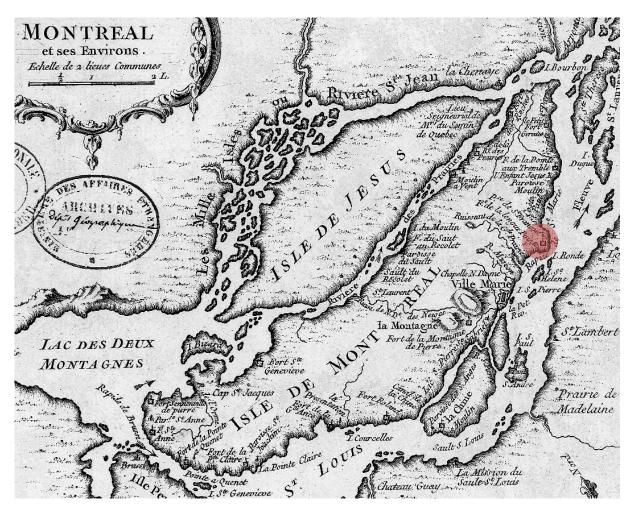


Figure 1. Bellin, Jacques-Nicolas, L'Isle de Montréal et ses environs [détail], 1764. Source: Gallica, Bibliothèque Nationale de France, <a href="http://gallica.bnf.fr/ark:/12148/btv1b67001778">http://gallica.bnf.fr/ark:/12148/btv1b67001778</a>

#### Côte Saint-François: a rural French settlement (1665-1760)

Prior to French New World explorations, Indigenous populations lived on the Island of Montreal. In the seventeenth century, during the French colonization, the Mercier-Hochelaga-Maisonneuve borough was located at the Côte Saint-François where a fort [le fort de la Longue-Pointe] was built as well as the stone church of Saint-François d'Assise de la Longue Pointe (constructed in 1724). In 1764, the cartographer Bellin identifies both along the Saint Lawrence River [highlighted in red, figure 1].

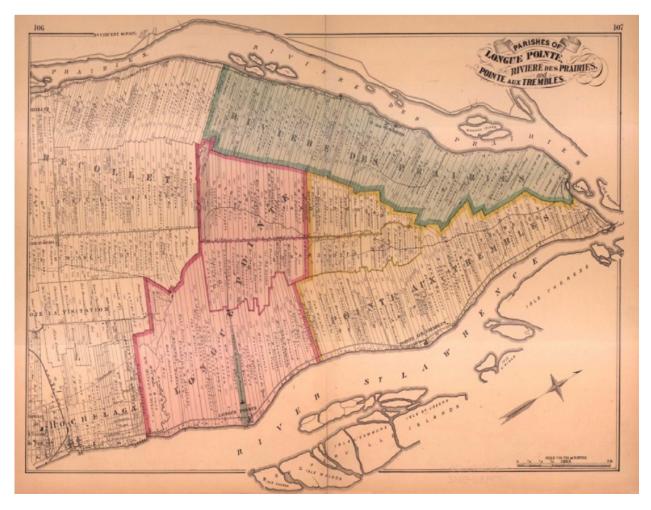


Figure 2. Hopkins, Henry W. Atlas of the city and island of Montreal, including the counties of Jacques Cartier and Hochelaga: from actual surveys, based upon the cadastral plans deposited in the office of the Department of Crown Lands / by and under the supervision of H.W. Hopkins. [ca. 1:2 400]. [S.I.]: Provincial Surveying and Pub. Co., 1879. Source: <a href="http://www.mcgill.ca/library/library-findinfo/maps/hopkins/">http://www.mcgill.ca/library/library-findinfo/maps/hopkins/</a>

This Parish of Longue-Pointe remained rural until the extension of the Port of Montreal to the eastern part of the Island, as shown on figure 2.

## Longue-Pointe: key infrastructure works, industries and institutions.

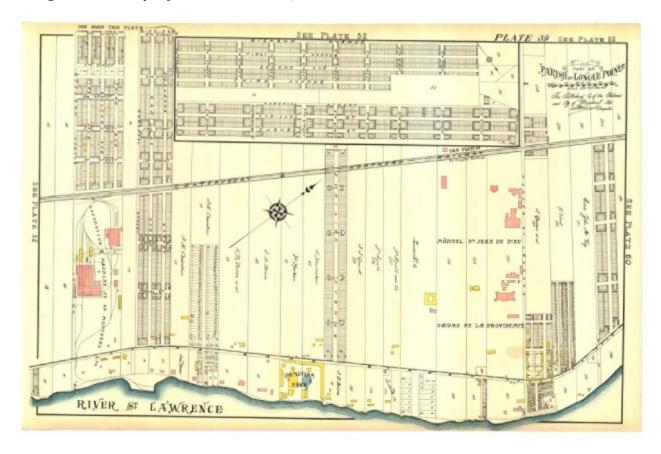


Figure 3. Pinsoneault, Adolphe Rodrigue, Atlas of the island and city of Montreal and Ile Bizard: a compilation of the most recent cadastral plans from the book of reference, the Atlas Publishing Co. Ltd, 1907, plate 59.

Source: http://images.banq.qc.ca/

Two decades after the opening of a wharf on Longue-Pointe in 1878,<sup>1</sup> a railway network was developed in the second half of the 1890s as shown in figure 3. This track also included a tramway line between 1903 and the 1920s. During the week, the tramway helped transport workers from their homes to work, as numerous industries were established in this part of town; and during holidays, the population was also

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<sup>&</sup>lt;sup>1</sup> Boussole pour Mercier. Un parcours à travers l'histoire du quartier. Les Éditions Histoire Québec. Collection Atelier d'histoire de la Longue-Pointe, 2009.

attracted to Longue-Pointe where a large amusement park also known as the *Dominion Park*, was opened to the public in 1906 (this park is represented on the bottom-center of figure 3).<sup>2</sup>

The parish and religious communities continued to play a significant role in education and health. In 1875, the Sœurs de la Providence inaugurated the Hôpital Saint-Jean-de-Dieu (presently known as the hôpital Louis-Hyppolite LaFontaine), a psychiatric hospital which, at the time, hosted four hundred patients.<sup>3</sup> As shown in figure 3 (center-right), following the 1890 fire, more than a dozen pavilions were built to replace the original building. In 1893, another fire destroyed the church of Saint-Francois d'Assise de la Longue Pointe and a new church was built two decades later, in 1914.

Up until the 1930s, Longue-Pointe also hosted a variety of industries from shoemakers to the production of munitions and to ice commerce.<sup>4</sup> Moreover, between 1911 and 1933 a number of refineries opened around the neighborhood; however, following the 1970 oil crash their activity diminished.<sup>5</sup>

The 1960s: Louis-Hippolyte-Lafontaine highway and the demolition of the heart of Longue-Pointe

Located between the Notre-Dame Street and the Saint Lawrence River, the Park de la PromenadeBellerive was opened in 1964. The historic urban core of Longue-Pointe was demolished between 19631967 to give way to the new Louis-Hippolyte-Lafontaine highway which aimed to link Montreal to its
southern shore and the auto route linking Montreal with Quebec City. This had a profound negative
impact on the core of the community. Slowly but surely, efforts are made to restore the heart of this
community. The initial step was taken when a new Saint-François d'Assise church was built between

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<sup>&</sup>lt;sup>2</sup> Mario Breton, «Mercier, un quartier à explorer [ressource électronique]: textes pour connaître notre milieu de vie ». Centre des lettres et des mots, Montréal, 2000. Available from: Centre de documentation sur l'éducation des adultes et la condition féminine, http://bv.cdeacf.ca/bvdoc.php?no=22932&col=RA&format=htm

<sup>&</sup>lt;sup>3</sup> Mario Breton, Mercier, un quartier à explorer: textes pour connaître notre milieu de vie: 25.

<sup>&</sup>lt;sup>4</sup> Mario Breton, Mercier, un quartier à explorer; textes pour connaître notre milieu de vie: 20.

<sup>&</sup>lt;sup>5</sup> Boussole pour Mercier. Un parcours à travers l'histoire du quartier: raffineries pétrolières, no 9.

<sup>&</sup>lt;sup>6</sup> Boussole pour Mercier. Un parcours à travers l'histoire du quartier.

Mario Robert, "Un vieux village disparaît: Longue-Pointe (1724-1964)," http://ville.montreal.gc.ca/

1964 and 1966. The church has emerged as a key parish of the community. Building on this tradition, we selected this site to incorporate our first urban greening project.

#### 2.1. Socio-economic survey

Mercier—Hochelaga-Maionneuve has a population of 129 110 inhabitants. The density varies according to the composition of urban fabric as shown on figure 4, but roughly, Mercier-Est, along Sherbrooke Street and the Louis-Hippolyte-Lafontaine highway the density is low.



Figure 4. Population density in 2006. Mercier—Hochelaga-Maisonneuve borough. Source: online Atlas socio-économique 2008 available on the website of the arrondissement Mercier-Hochelaga-Maisonneuve of the City of Montreal.<sup>7</sup>

http://ville.montreal.qc.ca/portal/page?\_pageid=95,17411564&\_dad=portal&\_schema=PORTAL

<sup>&</sup>lt;sup>7</sup> Guy Bédard, *Atlas socio-economique 2008*. Direction de l'aménagement urbain et services aux entreprises. Sources : Statistique Canada, recensements de 2001 et 2006. Avaialble from : Ville de Montréal, Arrondissement Mercier-Hochelaga-Maisonneuve

As shown on the maps figure 5 representing poverty and vulnerability, the selected borough contains a number of vulnerable areas (the important concentrations are identified in red).

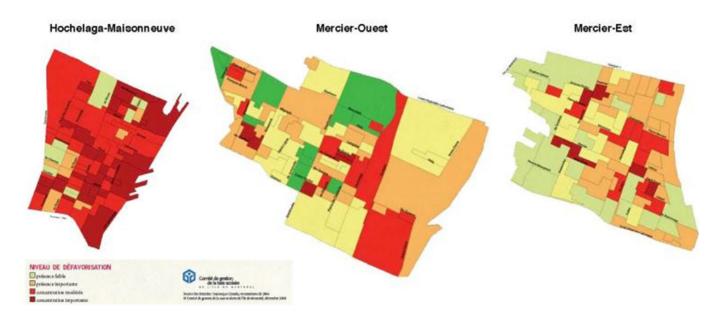


Figure 5. Poverty and vulnerability in Hochelaga-Maisonneuve, Mercier-Ouest and Mercier-Est.

Source: Statistiques Canada, recensement de 2006.

©Comité de gestion de la taxe scolaire de l'ile de Montréal, décembre 2008, p. 36 ; 42-3

Further, according to the survey entitled: "Les disparités dans l'accès à des aliments santé à Montréal," residents of the neighborhood, especially those living along the Saint Lawrence River, have a very low access to fruits and vegetables as shown in figure 6. Beyond Sherbrooke Street it increases. Moreover, in addition to this reduced access to fresh produce, the neighborhood is divided because of the layout of its infrastructure. Notre-Dame Street serves as a transport axes, the railway is another boundary and the port is an obstacle to accessing the waterway.

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<sup>&</sup>lt;sup>8</sup> Lise Bertrand, « Les disparités dans l'accès à des aliments santé à Montréal, Le CSSS de la Pointe-de-l'Île», Agence de la santé et des services sociaux de Montréal, 2007.

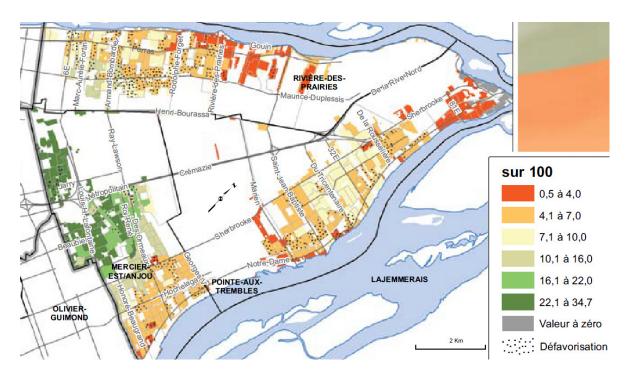


Figure 6. Répartition de l'indice d'accessibilité aux fruits et légumes, CSSS de la Pointe-de-l'Ile. Cartographie: Centre Léa-Roback, P.Pitre, Septembre 2007.

#### 3. ANALYSIS OF THE PHYSICAL ENVIRONMENT (BUILT, UN-BUILT, INFRASTRUCTURE)

Initially, the CDEST (corporation de development de l'Est<sup>9</sup>) helped us select Mercier-Est to integrate the pilot project because of its resilient community network and the active role Solidarité Mercier-Est (SME)<sup>10</sup> plays in the area. Together with the SME, we identified a number of potential interesting sites shown in figure 7. They included underutilized school yards, railways, parking lots and warehouses.

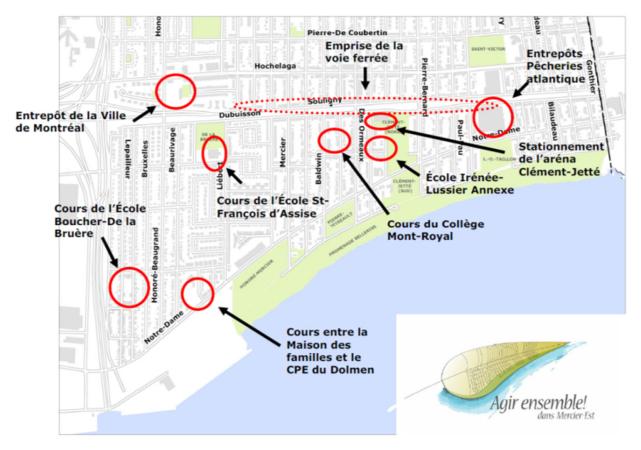


Figure 7. Potential sites for Paysage Solidaire in Mercier-Est. Zone de revitalisation urbaine intégrée Mercier-Est.

Following this site survey, we selected as the pilot project site for Paysage Solidaire the courtyard/parking surrounding the Saint-Francois d'Assise church (see figure 7, bottom left; and figure 8). This site is also located between the maison des familles, the Dolmen Kindergarten (Centre de la petite enfance (CPE) du Dolmen) and a Caisse Desjardins [financial services] (Caisse populaire Longue-Pointe, social headquarter).

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<sup>&</sup>lt;sup>9</sup> CDEST, http://www.cdest.gc.ca/

<sup>&</sup>lt;sup>10</sup> Solidarité Mercier-Est, http://www.solidaritemercierest.org/html/qui\_sommes\_nous.html



Figure 8. View and plan and of the plot on which the pilot project of Paysage Solidaire was integrated. Credit: Google earth (top) and the City of Montreal (bottom).

Besides its proximity to a church and a kindergarten, the selected site is also adjacent to housing and just across a dock of the Port of Montreal. Overall, the site was chosen for its unique location in the urban fabric of Mercier-Est, at the heart of a community. The social and intergenerational mix that combines parish members of all ages and children less than five years old enrolled in the CPE also made it an ideal site.



Figure 9. View of the selected site from the parking. The Saint-Francois d'Assise church and the maison des famille can be seen in the background. Credit: Leila M. Farah.

Moreover, its relative remoteness from the street network, especially the heavily trafficked Notre-Dame to the South, also reinforced our choice. The main challenge was how to incrementally green an asphalted parking lot. Four streets delimit the plot: Notre-Dame, George-Bizet, Beaurivage and Lafontaine. The heart of this plot currently mainly serves the purpose of a parking. We selected the back entrance of the church and invested a portion of the parking to insert this urban agriculture project on an area that roughly covers 2,000 m<sup>2</sup>. The insertion of the new urban greening initiative, although welcomed by the community at one level, was not easy as the community was required to park at little distance from the rear entrance to the church. Nevertheless, following a little negotiation and once the containerized garden started to grow and transformed the entrance in an attractive manner, the change was well received.

## 4. THE PARTICIPATION AND CONTRIBUTION OF THE EXPERT FROM THE SOUTH

After postponing his visit two times due to health problems, Dr. Palathiratne visited Montreal from May  $23^{rd}$  to May  $29^{th}$  2011.

## 4.1. Workshops and meetings with the community during Dr. Palathiratne's visit

## 4.1.1 Site visit, workshop and meetings with the Paysage Solidaire community



Figure 10. View of the main pilot project site: the Paysage solidaire garden on May 25<sup>th</sup> 2011, one day before its official setup. Credit: Leila Marie Farah



View of the Jardin du collège. Credit: Leila M. Farah



View of the Jardin Lafontaine. Credit: Leila M. Farah

On May 25<sup>th</sup>, the research team took Dr. Palathiratne on a site visit in the Mercier-Hochelaga-Maisonneuve borough and we presented the urban and social fabric of the area. We toured three gardens developed on the model of the Edible Campus project. This network of gardens consisted of the following:

- The main pilot project: Jardin solidaire (fig. 10, top): 700 Georges-Bizet Street (Mercier-Est)
- Jardin du collège (fig. 10, bottom): Corner of Tellier and Mousseau Streets (Mercier-Est).
- Potager de Lafontaine (fig. 10, bottom): 6120 Lafontaine Street (Mercier-West)

Luckily, since the setup of the Jardin solidaire was on May 26<sup>th</sup> 2011, we were able to visit it before and during its arrangement.

4.1.2. Meeting with the Service d'éducation et de sécurité alimentaire de Mercier-Est (Sésame)<sup>11</sup>

On May 25<sup>th</sup>, the Minimum Cost Housing Group's research team and Dr. Palathiratne met with Mr. Tremblay, the director of the Sesame, a social economy enterprise, located in Mercier-Est. Sesame aims to improve food security in the neighborhood and offers educational workshops on healthier diets. The organization has a well established food-related network with for example Bonne Bouffe, which delivers food baskets of fresh produce at an affordable cost. Sésame also has a food bank that is open to poor local residents (as determined by Statistiques Canada). Further, Sésame helps organize collective kitchens (cuisine collectives) where residents can interact and cook an affordable meal and coordinates a meals-on-wheel program that delivers prepared meals to an elderly or mobility impaired population.

Mr. Tremblay was familiar with the pilot garden (part of the harvest is delivered to the Sésame) and showed interest and support in our project of developing an aromatic/medicinal garden. He offered to link harvests or products to his well established network. We discussed the potential collaborations.

On May 26<sup>th</sup> 2011, we interacted with the community, starting with the landlord and finishing with the volunteers of the garden.

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<sup>&</sup>lt;sup>11</sup> Service d'éducation et de sécurité alimentaire de Mercier-Est (Sésame), http://www.lesesame.org/

#### 4.1.3. Meeting with the landlord of the Solidaire garden



Figure 11. Dr. Palathiratne meeting with Rev François Baril and the community event organizer of the Saint Francis of Assisi Parish, at the Parish Church on May 26<sup>th</sup>. Credit: Leila Marie Farah

First, we met with the priest of the Saint Francis of Assisi Church (François Baril) and the community event organizer to whom we gave a presentation and discussed the idea of integrating a medicinal/aromatic plant garden. They agreed on extending the garden to include this aspect.

They also informed us that in 2010, teenagers of St-Francis of Assisi day camp participated to a workshop held in the solidaire garden. Last summer, the parish also organized a picnic in the garden where the community shared a convivial moment around a meal. In sum, the Solidaire garden is a significant contribution to the parish, because since 2009, the Saint Francis of Assisi Parish has been labeled a green parish. This brand was awarded to the parish based on social and environmental efforts which include the refurbishment of the church and its energy efficient program; the urban agriculture project we initiated with YQQ; a composting facility that has subsequently been integrated and serves the garden, the community and volunteers, as well as a second hand clothes stand it manages. To some extent, this label echoes Saint-Francis of Assisi's legacy.

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<sup>&</sup>lt;sup>12</sup> Green church, http://eglisevertegreenchurch.ca/green/index.php?option=com\_content&view=article&id=173&Itemid=185

Moreover, children enrolled in the CPE du dolmen also engage in gardening activities. For example, they plant a selection of crops and aromatic plants that once harvested are transformed and prepared in the form of a Pizza. A particular area is dedicated to these children who re-use an obsolete swimming pool container for their activities.

#### 4.1.4. Café-rencontre with the volunteer community and members of YQQ



Figure 12. Café-rencontre with the volunteer community working on Paysage Solidaire and members of the NGO coordinating the maintenance of the garden, May 26<sup>th</sup> 2011. Credit: Leila Marie Farah

On May 26<sup>th</sup>, we also organized a café-rencontre with the volunteers and YQQ<sup>13</sup> (the NGO's members). Despite the rainy weather, volunteers attended the presentation and were very enthusiastic and extremely motivated to include a medicinal/aromatic garden to the existing project. We visited the garden and agreed on the location of the new addition, a strip along the church's wall. Lucie Bertrand, the Solidaire garden animator suggested that she would organize an additional workshop for plant selection at a later stage.

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<sup>&</sup>lt;sup>13</sup> Y'a quelqu'un l'aut'bord du mur (YQQ), http://www.info-yqq.com/

## 4.1.5. Meeting with the deputy of Bourget: Hon Maka Kotto.

On September 24<sup>th</sup> 2010, prior to the arrival of Dr. Palathiratne, the research team met with Hon Maka Kotto, the deputy of Bourget, <sup>14</sup> to discuss the potential expansion of Paysage solidaire in the area of the port of Montreal. He connected us with key representatives of the port. Professor Bhatt, Guy Villemure and Hon Maka Kotto's personal aid met with the Director of the port of Montreal and her colleagues at the administration and they were interested in the idea of urban agriculture, however, there is a number of security and control related issues which need be addressed because the port is a controlled territory. Minimum Cost Housing team is to prepare a proposal for the port to explore and study ways to integrate UA in and around the port.

### 4.1.6. Workshop and meeting with the Edible Campus community and Santropol Roulant

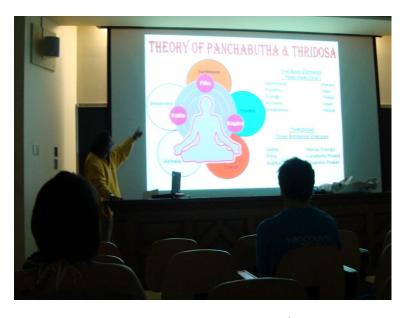


Figure 13. Presentation given at the McGill School of Architecture on May 27<sup>th</sup> to volunteers working on the Edible Campus and members of the Santropol Roulant community. Credit: Leila Marie Farah

During his stay in Montreal, Dr Palathiratne also visited, presented and interacted with other teams - communities of urban gardeners- involved in Urban Agriculture activities. Among them is the Santropol Roulant, who manages the mobilization of the Edible Campus garden on downtown Montreal.

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<sup>&</sup>lt;sup>14</sup> Bourget is a provincial electoral district located in Mercier-Hochelaga-Maisonneuve, on the island of Montreal.

Regarding Santoropol Roulant, we went to an Urban Agriculture Speed Dating on May 24<sup>th</sup> and had the opportunity to interact, share our perspective and learn from other individuals, groups and NGOs about their current work and involvement in urban agriculture and food security projects like Action communiterre, NDG Food Depot, Alternatives, Urban Ecology Center.

Dr. Palathiratne also visited the Edible Campus on Friday May 27<sup>th</sup> and offered a presentation to the volunteers who help maintain the garden. Here again, his presentation was well received and volunteers were eager to learn more and have started growing an herbal plant garden on the McGill Campus.

## 4.2. MEETING WITH SANTÉ PUBLIQUE



Figure 14. Meeting members of the Direction de Santé publique de Montréal, May 26<sup>th</sup> 2011.

Credit: Leila Marie Farah

On Thursday May 26<sup>th</sup>, we met with Santé publique. Dr. gave a presentation of key principle of Ayruvedic medicine and showed some of his work, particularly the Edible Landscape Project that was realized with the support of IDRC in city of Colombo between 2005 and 2007. The experts were positively surprised by his presentation and were introduced to an aspect of the health delivery system that they were unfamiliar with. They also showed interest and curiosity in a number of plant types and their health benefits particularly since it may be possible to grow some of them in our climate.

## 4.3. ACTION PLAN FOR THE 2011/2012 GARDEN



Figure 15. Visit and identification of plants at the Pépinière Jasmin, May 28<sup>th</sup> 2011. Credit: Leila Marie Farah

Following the café-rencontre with the Paysage Solidaire volunteer community, one member expressed interest in joining the research team to identify potential crops that could be included in the garden. This volunteer of Romanian heritage had worked with ill patients (trying to help them find natural and herb-based remedies), and was familiar with a number of medicinal plants; hence we decided to visit the Pépinière Jasmin on May 28<sup>th</sup> 2011 as it offered a wide variety of plants. Unfortunately, the volunteer could not come, but we continued with our visit.

We toured perennial, annual and aromatic plants. There was a great selection of indigenous plants from Quebec that we would like to potentially include; however, neither Dr. Palathiratne nor any members of our team have sufficient knowledge on these plants, their benefits, their

toxic level, and their transformation processes. It would be useful to contact an expert in Quebec indigenous plants and select some with medicinal uses.

Aromatic plants that were identified by Dr. Palathiratne included coriander, blue basil, as well as Aloe, a plant one can peel, and once its jelly-textured meat is collected it can be mixed with olive oil and applied externally to the body, hence rejuvenating the skin and revitalizing the hair.

In the course of the 2011 season, a workshop with the community will be led by the Jardin solidaire coordinator to identify the plants they will start growing. The site has already been approved by the parish and the community.

#### 5. EVALUATION

Document the University-NGO learning process; the contribution of the expert from the south; the interventions on the ground based on the research framework.

## 5.1. University-NGO learning process

In the framework of Making the Edible Campus, an urban agriculture project that has inspired Paysage Solidaire and that is located on the McGill downtown campus, the University-NGO relationship is excellent. The NGO needs the University's site and visibility, since 2010, it also receives funding from the newly established Sustainability Fund Project to cover the costs of its staff, and a number of McGill students engage in the garden's activity. This proximity and openness is very helpful in enabling a strong and growing leaning process that can be considered symbiotic.

In the case of Paysage Solidaire, the relationship is different. First, the site is quite distant from the university, second, YQQ is very active in applying for funding to cover the expenses of its staff and develop socially-inclusive activities and is less willing to discuss and develop a more comprehensive plan for the project. Its short term strategy encourage it to develop multiple projects with a maximum of financial support, but the draw back from this alternative is the creation of multiple pilot projects that conflicts with the research team's objective of creating a well structured network of projects with a long term vision.

There has been a regular turnover of staff at YQQ. YQQ repeatedly fails to credit our research team's contribution to the project and disregards and diminishes our efforts. As a result, the NGO-University relationship is not as constructive as we would have liked. Nevertheless, throughout the development of this project, the research team has included design students who have interacted with the community and learnt a good deal from this empirical work.

## 5.2. Contribution of the Expert from the South and his impressions

In his presentations, Dr Palathiratne explained theoretical principles of Ayruvedic medicine and indigenous thought related to gardening, physical health and more balanced diets. He illustrated these principles with empirical projects he has worked on in Sri Lanka including the example of Making the Edible Landscape (MEL), an IDRC funded project led by Professor Bhatt between 2004-2007. In the framework of MEL, Dr. Palathiratne helped identify and select key plants to improve the dietary intakes of the local vulnerable community involved in the urban upgrading project. Despite the fact that these indigenous principles and plant uses were new to the Montreal community, Dr. Palathiratne found the public very responsive and very interested in his work. He also found that the public health department was unfamiliar with Ayruvedic medicine practices and plants, nevertheless, they showed curiosity and expressed interest.

The enthusiasm, engagement and energy of community members in Montreal impressed Dr. Palathiratne. He met with individuals of various cultural and geographic backgrounds (Romania, Quebec, Indigenous community close to Oka, India, Mexico and Iran) who worked together in groups and shared a common interest: growing food in cities, eating fresh produce and adopting healthier diets. Overall, he found that volunteers worked democratically towards achieving a commun goal and were well versed in urban agriculture. In contrast, the community of the informal settlement of Halgaha Kumbura in Sri Lanka was far from being as knowledgeable [likely because residents were very vulnerable and poorly educated] which required setting up an awareness strategy, exhibit and communicate the benefits of growing a selection of crops. In very low income communities with imbalances, community cohesion is difficult to achieve, however, Dr. Palathiratne's experience shows that schools are ideal places to introduce Urban Agriculture activities. Our expert observed a lack of motivation in the South – although his team had offered to the community to collect seeds for their personal use, they found a lack of interest. Another obstacle that Halgaha Kumbura faced was vandalism. In Montreal, Dr. Palathiratne remarked a relatively low rate of vandalism which contrasted with his observation in the South, where a number of residents sought quick alternatives to generate some income rather than invest in labor intensive and longer term harvests. Moreover, climate also played a harmful role on the agricultural activities introduced in Halgaha Kumbura: in 2010, heavy rains flooded the settlement for a 10-14 day period and damaged all the horticultural works.

Further transfers of knowledge about food habits and plant uses would be of interest; however, they should follow legal and other procedures. In this project, we do not intend to introduce new plants without studying their potential effects on health and the environment. Transplanting tropical crops could have negative repercussions like the spread of diseases or a change in the ecosystem. But as part of an academic research and with the support of the Montreal Botanical garden, it would be worth analyzing how best to integrate one plant at the time, starting with the *centinalle* [one of the plants introduced in Halgaha Kumbura], because of its short growing period and it high nutritional values. In the case of the medicinal plant garden in the Jardin Solidaire, the community will choose specific plants for their own needs. However, medicinal plants are more complicated to find in the market and harder to introduce, because there is a need to know how to process them.

#### Dr. Palathiratne suggested further research in the following areas:

What repercussions does this project have on the diets of the community of volunteers, and on those to whom a portion of the harvest is given? Quantifying the harvest, the proportion of products that the community receives, the calories, the economic savings, and the overall benefits of gardening would be useful. This important set of questions he has raised will help advance further the research and get some evidence based results. Unfortunately, funds for this investigation are not included in the present project cycle, but could be developed as a newly framed research project based on the present pilot projects that the Minimum Cost Housing Group (MCHG) has been involved in.

What are their impacts of soil and air pollution on the harvest? According to Dr. Palathiratne, urban agriculture sites should be located in courtyards or in protected spaces distant from streets and car traffic. Moreover, as most of the toxins come from the rain, one should study the quantity of Lead and Cadmium in the harvest of these community run urban project and compare them with the industry produce as well as country harvests.

#### 5.3. The work on the ground and dissemination

The Paysage solidaire initiative has been quite successful as the number of gardens is growing. In 2009, the main pilot project was developed in Mercier-Est, and in 2010 a garden took root in Mercier-Ouest. In 2011, two additional gardens are being developed in Mercier-Ouest. Besides, Paysage solidaire has expanded and included composting facilities managed by YQQ under the project name CAUMUNAUterre, as well as green wall aiming to disguise concrete facades and embellish the streetscape: VERTical. To keep volunteers informed of Paysage solidaire's activities and for visibility purposes, a public facebook account and a website were created by the NGO and the community [http://www.facebook.com/paysagesolidaire; http://paysagesolidaire.wordpress.com/]

The research team has and will continue to present the project both in French and in English to a wider public at international conferences. For example, in May 2010, Leila Marie Farah and Professor Vikram Bhatt gave an oral presentation entitled "Paysage solidaire: vers des infrastructures urbaines fertiles" at the 78e Congrès de l'Acfas. In August 2011, Leila Marie Farah and Professor Vikram Bhatt will present the output of this research in a workshop at the Montreal 2011 Ecocity World Summit.

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