Summit Report

1st Global Summit on Metropolitan Agriculture

28-30 September 2010,
Rotterdam, The Netherlands

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"The Summit is an opportunity to build relationships"
- Colleen Magner

OVERVIEW

"Metropolitan Agriculture is a way of looking at new connections between agriculture and cities that contribute to sustainable development (of both the city and agriculture). Metropolitan agriculture takes place in a metropolitan environment, is aimed at the diverse needs of that metropolitan environment and makes use of the characteristics of that metropolitan environment".

- Henk van Latesteijn, CEO TransForum.

About 18 months ago, the Metropolitan Agriculture Innoversity was conceived by TransForum and Reos to be a new action-learning network dedicated to initiating the processes necessary to create meaningful change in the agricultural and food sectors. Its stated objective was to provide a forum for knowledge-sharing and co-creating the Metropolitan Agriculture vision and practice around the world. It would deliver three sets of results at both the global and the local levels–initiatives, capacity-building, and relationships.

Since that time, in six cities worldwide, each facing different contexts and critical issues, the Innoversity has convened multi-stakeholder teams from across the food system to begin taking concrete steps towards increased sustainability for the cities and the systems. The Global Summit in Rotterdam from September 28-30, 2010 was held designed to bring those teams together with others who were also working with these issues. In order to showcase the work being done, forge new relationships, learn from and with each other, and to serve as a reflection and inflection point, the Summit had a unique participatory design.

Energy and synergies were created that deepened the theory and practice of Metropolitan Agriculture. It was a unique gathering in the sense that it created an intensive and constructive dialogue between stakeholders from the whole agricultural spectrum; from industrial agricultural to urban agriculture. This report tells the Summit's story.

BACKGROUND

How can Metropolitan Agriculture Contribute to Sustainable Development in Cities?

"Within the world of food policy, there is a creeping recognition that we are on the cusp of a fundamental re–structuring of the global food supply, and that radical solutions might be needed. But 'solutions' are always framed to answer 'problems'. How the problem is defined and percieved will directly affect the sorts of solutions that are proposed".

- Tim Lang and Michael Heasman

The MetroAg Innoversity is a new action learning institution dedicated to initiating the processes necessary to create meaningful change in the agricultural and food sectors.

In 2007, the UN famously announced that within the year half of the world's population would live in urban areas (UNFPA 2007). The majority of today's population increase takes place in cities; particularly in the global South, which the UN estimates will account for 93% of all urban population growth over the next four decades (ibid). This poses significant social, economic and environmental challenges. However, in the context of an increasingly globalised economy, where cities are focal points of change, all cities now face significant challenges in meeting the complex and diverse needs of their citizens.

These needs take many different forms. Rapid urbanisation creates vast numbers of new consumers, often poor, who require affordable food. Changes in consumption patterns in rapidly developing countries such as China, where more people are eating high protein meat and dairy products, can damage ecosystems and strain supplies of staple foods. Middle class consumers in cities in the West continue to demand high quality food, while at the same time economic downturn has resulted in growing numbers of malnourished people, high unemployment and urban out-migration. Cities have fewer green spaces as competition for space and resources increases. Pollution creates environmental health risks for many city dwellers face shortages in basic services such as electricity, health and transportation as demandoutpaces supply.

At the same time, cities depend on a globalised food system that has removed agriculture from metropolitan space, also increasing their vulnerability to economic and environmental crises. Technological advances in storage and transportation allow food consumed in urban areas to be produced on the other side of the planet. This, combined with high yield crops and intensive production processes, has increased the distance between consumer and producer. However, most of these industrial production processes rely on high-input, chemically-based cultivation techniques that deplete soils. This leaves long-term yields in question as ecosystems and resources undergo severe strain. Global economic shocks can rapidly increase food prices, which disproportionately impact poor urban consumers, and globalised supply chains rely on cheap oil to get products from place to place.

Further, climate change has the potential to affect cities worldwide, from sea rise and salinisation of the water table in coastal cities to significant localised climate shifts in all other areas, while also posing problems for the global food supply (Simon and Gueye 2009). A recent report on the Nile delta, where the city of Alexandria is located, reports that 60% of Egypt's food supply is under threat, and wheat and maize yields could be down 40% and 50% respectively in the next 30 years. On a global level, agriculture must aim for dramatic increases in efficiency, less intensive resource use, and a reduction in external inputs.Cities possess the knowledge, infrastructure and influence necessary to act as a catalyst for these changes. While the complexity of the challenges often results in highly politicised debate, no single actor can claim to have adequate solutions. Increasing social opposition to the industrialised agricultural practices discussed above has not translated into viable alternatives for many consumers and meets resistance from other key stakeholders in the food system. Climate change policy is the focus of volatile international negotiation, with various sides entrenched in what appear to be irreconcilable stances. Such fractured disagreement moves us ever further from tackling the problems that face the agricultural sector and cities around the world. But these immense challenges can also be seen as opportunities for creative dialogue and innovative action.

The Metropolitan Agriculture Innoversity aims to transcend conventional barriers and evolve the logic of existing agricultural systems to better serve the needs of metropolitan residents.

What is Metropolitan Agriculture?

Metropolitan Agriculture is a framework for understanding the diverse ways in which agriculture can play a role in cities. It comes out of the work done by TransForum and its partners over the last several years developing innovative pilot projects that incorporated agriculture with other aspects of metropolitan systems. Metropolitan Agriculture is a lens that focuses our attention to the huge potential synergy between agriculture and its metropolitan environment. Applying that lens will lead to a rich diversity of agricultural activities that take place in that metropolitan environment, who are specifically aimed at meeting the different qualitative and quantitative demands and needs of the consumers in that metropolitan environments and do so by intelligently taking advantage of the characteristics of that metropolitan environment. In this way agriculture becomes a major contributor to the sustainable development of metropoles, while in turn that metropole becomes the driver for more sustainable development of agriculture!

Within this broad framework, there is considerable potential to integrate agricultural activities with diverse aspects of metropolitan development, from the most obvious function of food production to more innovative work with recreation, health care and waste management systems.

Metropolitan Agriculture is a pragmatic vision for a new agricultural logic, one that attempts to address our current challenges through four key principles, thus increasing efficiency and fully utilising the resources of cities.

1. Using Metropolitan Resources as Design Elements for New Agro-Systems and Initiatives

Agriculture and cities have become separated. The relationship that historically existed between agriculture and cities has become tenuous. At the same time cities are often commercial centers and the locus of creative energy. Cities exhibit a valuable combination of diverse social values & networks, business entrepreneurship & social activism, knowledge, technology, logistics and creativity.

The possibilities for a deeply symbiotic relationship between cities and agriculture are startling. New agricultural systems taking advantage of metropolitan characteristics represent a bold new evolutionary direction, a unique opportunity for healthy interdependence and innovation rather than a burden.

2. Responding to the Diverse Demands and Needs of Metropolitan Populations

As metropolitan populations grow, their diversity provides opportunities for the growth of innovative food and agriculture systems. Characteristics such as value differences, income diversity, religious and cultural diversity, and population density are all fuel for entrepreneurial activity. By acknowledging the variety of demands and needs we can actively enlarge the space for experiment and create a palette of valuable approaches and results.

3. Constantly Striving to Develop Multiple Values across Diversity

The complexity of modern agricultural systems involves a vast diversity of stakeholders. Historically, relationships between stakeholders have at best been contractual and at worst deeply antagonistic.

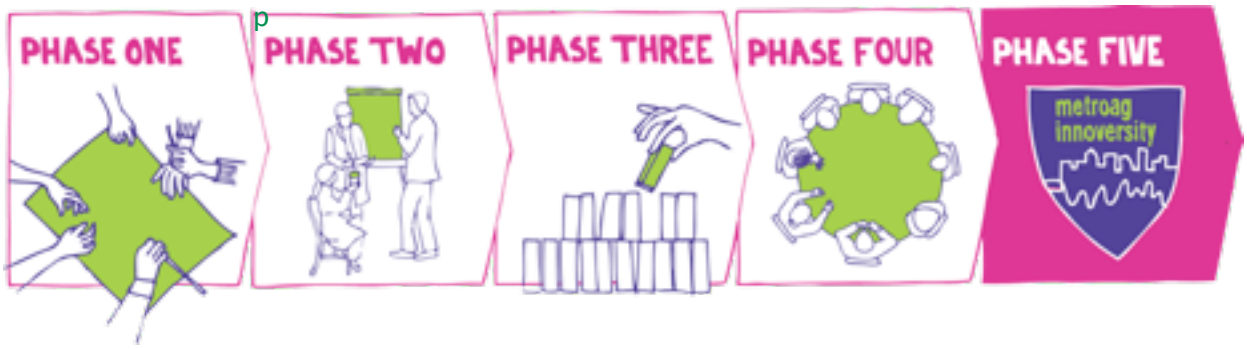
Metropolitan Agriculture proposes the development of shared values across sectors and stakeholders. This means taking the time to apply practices that allow the development of new links and unprecedented cross-sector alliances. This is the key for turning perceived trade-offs into value-adding complements.

4. Creating New Combinations (of Spatial, Technological, and Cross-Sector Elements) that Result in New Value Propositions

Food and Agricultural systems as multi-functional systems represent the opportunity for a shift in how we engage with agriculture. Spatial integration makes it possible to use land for multiple functions: for living, working, leisure and food production. Technical integration makes it possible to produce on a cradle-to-cradle basis making optimal use of nutrient, water and energy resources. Cross-sector integration creates opportunities for new agricultural services, ranging from waste management and energy production, to professional health care in a green environment.

Integrated food and agricultural systems can transcend the limited role that food currently plays in our responses to social and environmental challenges, to provide new innovative business opportunities. Beyond providing calories and nutrients, these new systems can also be designed to address issues such as healthcare, quality of life in the urban environment, education and energy production. Together, these principles form the seeds of an operating logic for an innovative form of sustainable agriculture focused on the needs of metropolitan populations.

Inclusivity Entrepreneurship Action Learning Co-Creation



Introducing the MetroAg Innoversity

"Sharing Knowledge is not about giving people something, or getting something from them. That is only valid for information sharing. Sharing knowledge occurs when people are genuinely interested in helping one another develop capacities for action; it is about creating learning processes"

- Peter Senge

The MetroAg Innoversity is a multi-stakeholder platform for supporting action learning experiments in the field of agricultural systems. The MetroAg Innoversity takes cities and city based issues as the starting point for action and innovation. The work has begun in Amsterdam, Chennai, Detroit/Flint, Johannesburg, London and São Paulo.

The objective of the Innoversity is to be a leading platform for knowledge sharing and for evolving the Metropolitan Agriculture vision and practice around the world.

The Innoversity combines the traditional purpose of a university – education and research – with learning from on-the-ground innovation, testing and piloting practical innovations in the field. The Innoversity is a shared platform for innovation and change between participating cities; it is a network for sharing and co-creating knowledge and experience gathered from projects all around the world.

The Innoversity operates according to a unique set of values and principles, all of which aim to ensure the practical relevance of Metropolitan Agriculture to the challenges facing us. These core values include:

Inclusivity

The Innoversity provides space for processes where diverse viewpoints can co-exist. It is a learning environment, where new experiments and innovations that fit within metropolitan agriculture can be prototyped between farmers and consumers, business leaders and NGOs. We encourage a variety of stakeholders to join forces, and co-create initiatives with impact and lasting value.

Entrepreneurship

Addressing current food challenges in cities presents far-reaching social, environmental and business opportunities. An entrepreneurial and streetwise stance is a key advantage when meeting diverse market demands, ensuring access and supply of food, reducing risks, minimising waste of energy and materials, and creating value, not just for single organisations, but for society as a whole.

Action-Learning

Stakeholders participating in the Innoversity are invited to learn by doing, through co-creating new ideas and innovations, and prototyping them in the field. Learning is experimental and pragmatic, implementing new initiatives and learning from market environments.

Co-Creation

Complicated challenges require collaborative approaches. Problems never have single owners, and best practice is often unsuited to this complex and fast-changing environment. The Innoversity generates an environment in which people can work together to create innovative responses, learning how to see from diverse points of view and use their insights to turn problems into opportunities.

THE SUMMIT

The 1st Global Summit on Metropolitan Agriculture took place on 28-30 September 2010 in Rotterdam, The Netherlands.

Through a variety of documentation mediums material was gathered live at the event.

Agenda

Tuesday, 28 September

Van Der Valk Hotel

18:30 **Opening Dinner**
From Farm to Fork: Linking Us to Our Food and to Each Other

Welcome and Introductions

Opening Remarks by Rudy Rabbinge, Wageningen UR

Wednesday, 29 September

All morning activities took place at the Van Nelle Ontwerpfabriek

08:30 **Opening Plenary**

Setting the Stage for the Metropolitan Agriculture Innoversity
Comments by Henk van Latesteijn, TransForum

How We Will Work Together at the Summit
Provocation from Adam Kahane Author of Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities and Power and Love: A Theory and Practice of Social Change.

Seeing the System Part I: City Team "Teasers"
Brief introductions to the Metropolitan Agriculture team projects.

Seeing the System Part II: Project Marketplace
Explore what the participants of this Summit are already working on in Metropolitan Agriculture and learn more about the Innoversity concept. Visit the displays, talk to each other, ask questions, make suggestions, and offer resources and coaching through a structured process.

Making Sense of What We've Seen:

Small group conversations looking at the patterns in our current situation, our journeys, and what we are trying to achieve.

Seeing the System Part III: Practice for Seeing with Fresh Eyes/ Orientation to Learning Journeys

13:00 **Lunch/Learning Journey Sign-Up/ Preparation with Learning Journey Team**

13:30 **Seeing the System Part IV: Learning Journeys**
Seeing from the Outside In—Visits to Metropolitan Agriculture projects and other sites that may challenge what we think we know.

18:45 **Dinner and Debrief at Local Restaurants**

Thursday, 30 September

All morning activities took place at the Van Nelle Ontwerpfabriek

08:30 Morning Plenary

Building On Our Learning Journey Experiences Together:
What's really happening in the system? How will these insights help us move our work forward more effectively?

Plenary Provocations

10:30 BREAK

11:00 Concurrent Conversations with Met Ag Champions (Breakout/Syndicate Rooms were located on the Third Floor)

- The Potential of Metro Ag for Food Security—hosted by Dr. Rudy Rabbinge, Wageningen University, Netherlands and Florian Kroll, food security and environmental researcher and consultant, South Africa (Coffee Fabriek, Stage Area)
- Business Models for Linking Smaller Producers to Metropolitan Markets — hosted by Dan Carmody, Detroit Eastern Market, USA (Arabica Room) and Jan Kees Vis, Unilever, Netherlands (Havana Room)
- The Role of Reflective Learning in Practical Metro Ag Innovation Projects —hosted by Dr. Chris Peterson, Michigan State University, USA
- Business Models for Sustainable Intenstification—hosted by Dr. Peter Smeets, Wageningen University, Netherlands (Virginia Room)
- Financing Metro Ag Innovations—hosted by Kalyan Chakravathy, New Delhi, India (Coffee Fabriek, Lounge Area)
- Integrating Agriculture in Urban Spatial and City Planning — hosted by Kathryn Underwood, City of Detroit, USA and Marco van Steekelenburg, Province of South Holland (Piggleme Room)

12:00 LUNCH

12:45 Plenary Provocations

13:15 Open Space Marketplace

What conversations need to happen now? What questions have sparked your interest? What do you need to hear more about? What can't you leave without talking about? Participants will set the agenda for two rounds of concurrent sessions. You may offer to host a conversation about a topic that you see needs to be discussed or attend one that you have energy for.

14:15 Open Space Round 1

15:15 BREAK

15:30 Open Space Round 2

16:30 BREAK

16:45 Afternoon Plenary

Given all of this, what is needed in our cities? What will help us sustain our food and

agricultural systems? What outcomes are we trying to create? What would support these outcomes? What do we need from each other to help us do what is needed of us all?

18:30 BREAK

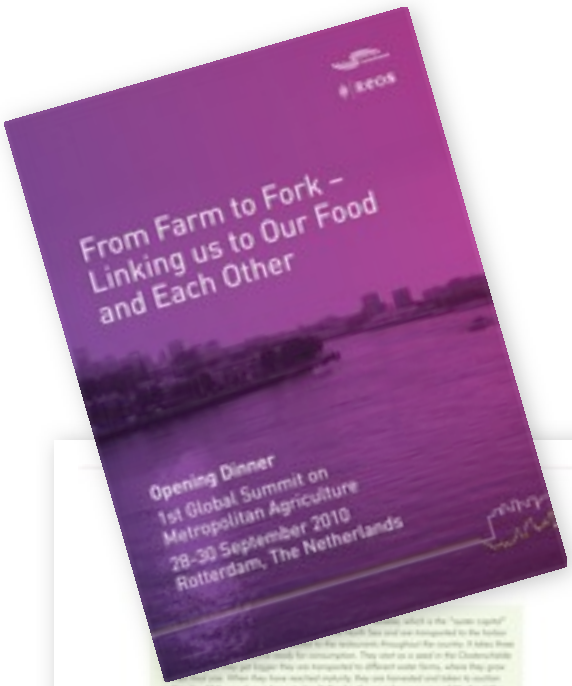
20:00 **Dinner and Summit Closing** at the Fabriek

28 SEPTEMBER

Opening Dinner

On the evening on the 28th September, participants and facilitators gathered together for the opening dinner of the Summit. Rudy Rabbinge, chairman of TransForum's International Advisory Board, provided brief opening remarks.

The title of the dinner was From Farm to Fork: Linking Us to Our Food and Each Other. The unique menu identified the origin of the course's ingredients on a map. During the dinner, diners switched tables for each course in a 'dance' which gave the participants the opportunity to meet each other and seeded conversations (with support from the table's hosts).



Dinner Questions

What is your personal and professional connection to food and agriculture?

What are you working on now that most excites you?

As you look at the map and read a little about where tonight's food comes from, what surprises you? Does anything make you curious? (It would be interesting to hear from those from the Netherlands about anything additional they might add as well).

As you think about some of the ingredients on your plate/on this menu and you think about metropolitan agriculture, what comes up for you?

What is unique to your region that you want us to know?

If you were a "betting person," where in this field would you put your money?

Where do you see the NEW opportunities showing up?

Anything else you'd like to share?

29 SEPTEMBER

Opening Plenary
8.30am-1pm

Setting the Stage for the Metropolitan Agriculture Innoversity.

Henk van Latesteijn, General Manager of TransForum, gave his view on Metropolitan Agriculture:

Metropolitan Agriculture is a set innovative agricultural activities in a metropolitan environment that take advantage of the urban landscape to meet consumers' demands. Metropolitan Agriculture can be seen as a lens, which "makes you see the world in many different colors, and without it everything seems black and white".

In speaking about the complexity of this vision Henk said,

"Metropolitan Agriculture is a design enterprise"

which isn't about optimizing but redesigning business.

"Criticism needs to be reshaped into design elements..."

This design solution starts with cooperation instead of fighting.

"Start collaborations with people you never dreamed of before. Step out of the box and collaborate!"

According to Henk, we often organize a conflict without a solution; polarizing the debate. We have to stop fighting with each other and re-phrase the criticism as design criteria, re-framing the issue to look at the same problems to see new solutions.

"There is no single solution, there are mutiple
solutions."

Historically, agriculture has its own culture, and farmers hardly ever spoke to the city. Metropolitan Agriculture represents a shift in this and leads to diversification, where there is no one right answer but millions. Metropolitan Agriculture uses all of the resources in a metropolitan area to make agriculture more sustainable.

"We need common motivation to move forward"

Linking back to Metropolitan Agriculture as a team effort, Henk spoke of the metropolitan community and how the Innoversity can create a space for this community in which to act and evolve.

Ultimately Henk framed Metropolitan Agriculture within sustainability, going back to how the vision is framed by the triple bottom line of people, planet and profit. Henk posed the question; can agriculture be a catalyst for the sustainable development of metropolitan areas?

Check in

Colleen Magner facilitated a check-in, asking participants to have a conversation about their hopes for their time together, and what they might offer towards that.

"Where are you on this map of hopes?"
- Colleen Magner

"We often don't want to go where the biggest learning happens"
- Colleen Magner

Some statements made by participants:

"We have to use the transitional moment that we have"

"We can help and see people communicate with each other hear from other people facing the same challenges- like those who are working with others who working to improve food security and food justice"

"Help others see their own diverse constituency use this opportunity to participate on the global stage and learn to work together as different groups working in the same space on some of the same issues"

How Will We Work Together at the Summit?

Provocation from Adam Kahane Author of *Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities* and *Power and Love: A Theory and Practice of Social Change*

What does actually take to make progress on addressing complex social challenges? He gave the example of a South African joke as an introduction to his solution:

"There is a practical option and a miraculous option; the miraculous option is that we would all get on our knees and pray that a bunch of angels to come down and find a solution. The practical solution is that we stay here and work together"

Social challenges are complex. There are three types of complexity:

- Dynamic Complexity; where cause and effect are far apart in place in time and you need to use a systemic approach.

- Social complexity; where there are so many diverse perspectives and players involved that you need a participative approach, involving the actual stakeholders, rather than experts

- Generative Complexity; problems and situations require new solutions because they are new problems. This requires an emergent process, because we can't rely on old ways or best practices from the past.

In terms of working in groups, the most basic mode of working in groups is talking and listening. There are different levels of listening:

1. Downloading; saying what we always say and not hearing a word.
2. Debating; saying what we think and listening to decide if we agree with what's been said.
3. Dialoging; saying what we think and where it comes from and trying to listen to understand where it is coming from.
4. Presencing; where we listen to try and figure out what is arising from this group as a whole.

"Listen with empathy"

Adam also talked about power and love, and the interplay between the two. Love is the drive to

make whole – to reunite the separated, and power is the drive to grow to re-create.

"Power without love is reckless and abusive and love without power is sentimental and anemic"

Most of us have a comfort zone of being on one side or the other of the power/love paradigm and we have to learn to act using both. In this discussion he addressed the balance of qualities traditionally seen as feminine and masculine.

"We are not used to making distinctions in the feminine functions"

This process requires time and patience, not just downloading and debating but dialoguing and presencing. Not either power or love, but both.

"We need lots of opportunities for trial and lots of opportunities for error"

Seeing the System Part I: City Team "Teasers"

For the last year, six teams in six cities have been working on how Metropolitan Agriculture can contribute to the sustainable development of their city. Here, brief introductions to the Metropolitan Agriculture team projects were given.

Johannesburg

"Would we be able to change South Africa's economic structure through food?"

The informal market is huge in Johannesburg. The question is whether Metropolitan Agriculture can benefit both the formal and informal market. Comments were made on the centralized Johannesburg Fresh Central Food Market where most food goes through market.

- Agriculture is 40% of state's GDP
- 8% population living in slums

"Can we create jobs through this?"

In the Metropolitan Agriculture project, activities have included stakeholder interviews to hear needs relating to growing metropolitan food demand and assess present supply chain catering.

The challenges were framed as finding the right people, social/political and economic factors, clear understanding of objectives and attaining a high level of stakeholder involvement.

"Let's call Metropolitan Agriculture a social movement"

An asset identified within the Metropolitan Agriculture project is a network willing to share and collaborate, where investment is eager.

Issues to confront with Metropolitan Agriculture could be:

- Race
- Poverty- changed economic structure
- Food-sustainable food system
- Unemployment- employment for the disadvantaged
- Urban Agriculture is still very marginal as is organic food

Detroit / Flint

"What can we do with our green and vacant spaces?"

In the Detroit / Flint area there was a rapid population growth and now great urban flight and lots of vacant buildings:

- 50% population decline in both Detroit and Flint from 2 million to 900,000 in last 50 years
- 35% unemployment

An opportunity to utilize the vacant land and the unused labor for urban agriculture

- Only 41 % of housing is within walking distance of a grocery store
- Diversity map / race split

"If it doesn't make dollars, it doesn't make sense"

"we're trying to show the world what happens in a post industrial area"

This region is moving from competition of interests to balancing complexities. The community responded and the world is responding, there are 1200 productive gardens, 200 community gardens has been created with vegetables, chickens, bees, all under the regulatory framework of a city.

Food demand grows, protein demands grows, well faster than the demand for "slow food".

- Being detached from natural cycles has worsened our mental health
- There is some kind of counter-culture happening; qualities matter and values matter.

Challenges:

- Scale: Should we go big? Should we go small? What is big? What is small?
- Time: should we go permanent? should we go temporary?
- Culture: Who likes it? who doesn't? How do we conciliate backgrounds as different as white educated hipsters with black poor youth?

Approach:

- We are trying to move from 'either/or' to 'and/and"
- Context, context, context: what works in one place doesn't necessarily work in another.

Chennai

Chennai has one of the highest population densities in the world. 45 million population, 80% of people live in substandard conditions.

"We agree the innoversity is a very valuable concept, even though there are many challenges"

"Could we create a green belt around the city?"

Amsterdam

Agriculture claims land and space; land prices are high for those working in agriculture. There is a growing need for livable urban structures to increase food production for the increasing metropolitan population.

An example is Landmarkt, an agricultural market that connects metropolitan consumers with farmers. At Landmarkt small agricultural farms in the surrounding of Amsterdam, are connected with consumers. Thise small farms produces multiple goods.

Around the city agriculture connects country and city and connects with nature (example Agromere). In finding new food solutions for the city how can we find large scale production to a growing metropolitan population?

São Paulo

Water issues: First agriculture seemed as a threat to water, now it is seen as a partner. Metropolitan areas can be multifunctional.

Challenges:

- Connecting producers and closed loop cycles
- Multi functionality systems
- Meeting metropolitan demand
- Dealing with inequality
- Maintaining metropolitan space
- Food security
- Valuing cultural heritage
- Need for technical and credit support

Opportunities

- Distribution network
- Education and media channels
- Existing legislation
- Land available
- Organic waste
- Purchasing power
- Prototypes
- School lunches
- Reference centers
- Metropolitan Agriculture sector chamber
- Alternative marketing channels

"How do we confront lack of representation in the group? Most people are from alternative movements (slow food, organics, etc.)"

Integration of Flows

Local– global–micro–macro
Spatial–closed loop–distributive–technological

"How do we think about the future of food production in the context of food sustainability?"

Many of us choose to live in cities, but do we miss the rural ways of life? When we go to rural areas we like it, but we also like to live in the cities.

- Agriculture is changing to provide new products, new roles, not only food, fibre, energy.
- Environmental services,
- Social services (care farms, education)
- Bioenergy
- Cultural services
- Cities in developing countries re growing and the countryside population is shrinking
- Boundaries are fading, disappearing in the modern world
- NGO-business

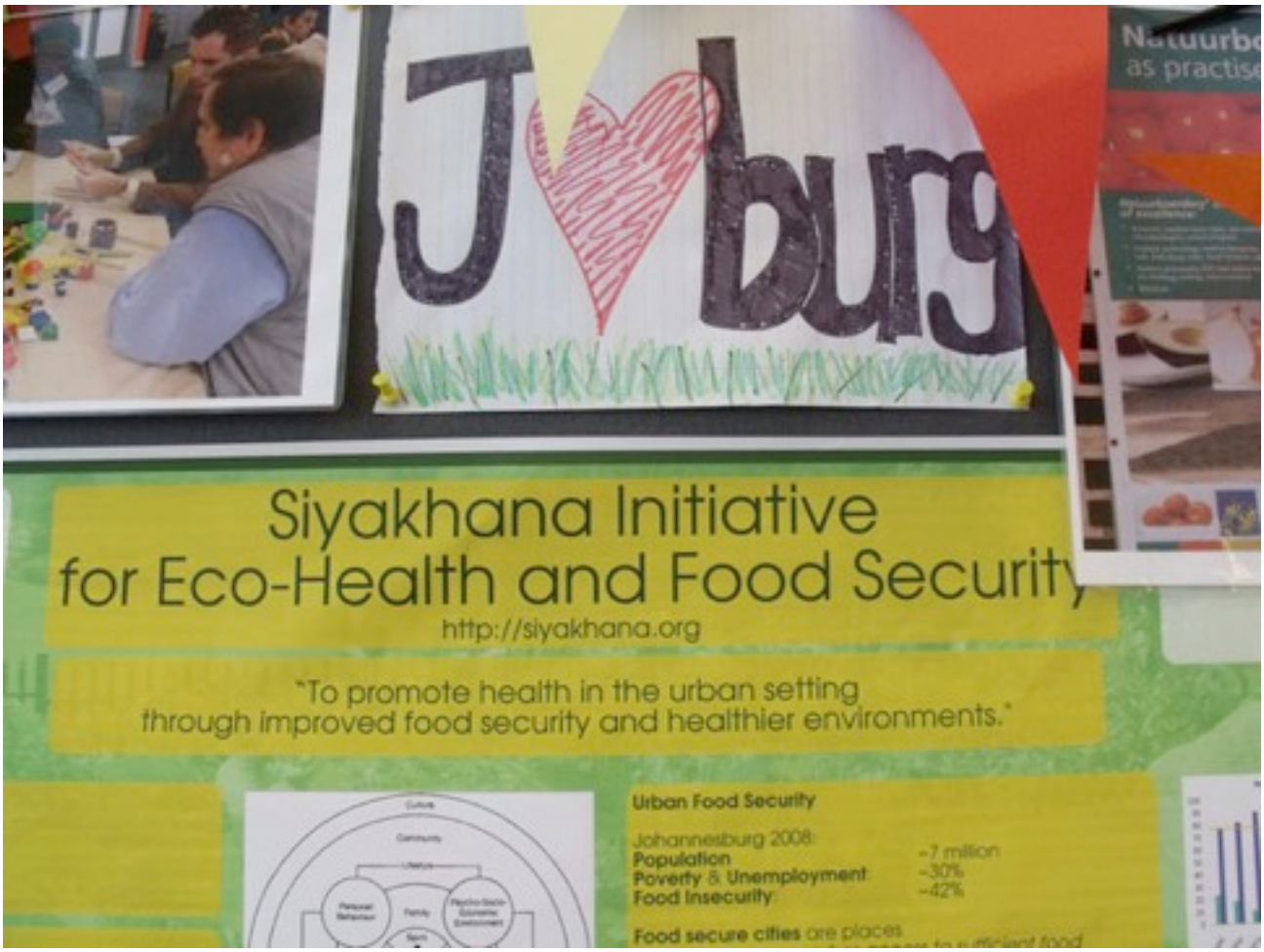
"Quantity does matter...Quality based on values
does matter"

"We need a better definition for Metropolitan Agriculture"

"Do we need a sudden convergence of different food movements or a slow evolution?"

Seeing the System Part II: Project Marketplace

In an informal "fair" or exhibition, project teams presented their project. Everyone was encouraged to visit the displays, talk with each other, ask questions, make suggestions, and offer resources and coaching through a structured process.


J burg
Siyakhana Initiative
for Eco-Health and Food Security
http://siyakhana.org
"To promote health in the urban setting
through improved food security and healthier environments."
Urban Food Security
Johannesburg 2008:
Population ~7 million
Poverty & Unemployment ~30%
Food Insecurity ~42%
Food secure cities are places

Making Sense of What We've Seen

Small group conversations looking at the patterns in our current situation, our journeys, and what we are trying to achieve.

After the first morning's presentations and the Projects Marketplace the group noticed a lot of similarities and also many differences. People from geographically distant places were talking about similar issues such as zoning regulation issues, city regulations about keeping animals, and issues with funding organizations.

Differences also jumped to the eye. We heard about the importance of food security in South Africa and India, but not in the Netherlands. Space is an issue in India and in the Netherlands, but definitely not an issue in Detroit, where the population has dropped by 60% in the past decades.

Participant quotes:

"I'm not alone on this island!"

"It's obvious to me it's not about food, everyone I heard was talking about social change" -

"My frustration here is with the vast amount of experts here, who don't get their hands dirty. We can't fix this purely from an area of academic expertise"

"The main challenges are cultural, how can we create a more positive image of agriculture?"

Patterns identified:

Socio-economic issues:

- Cities are dealing with social issues (racial, class) through agriculture
- Patriarchy; men still make decisions - need to engage women
- Poverty is a reality throughout the world – are we giving adequate thought to this?
- The needs for food security and food access
- Economic concerns always present
- Prices competition
- Jobs are in processing – seen as more interesting, farming is less 'boring'.

Issues of working together and involving the right people:

- Not all stakeholders are participating, how do we get them there?
- Researchers, policy makers and practitioners need a common language
- How do we get decision makers on board with Metropolitan Agriculture?
- Need for integration: money, race companies, organizations, NGOs
- Common thread of need of farmers to connect consumers with farmers, professors and communities - all need to be involved
- Work the solution, not the problem. Stop blaming, focus on common goals

Governance issues:

- Government isn't doing that much to support efforts
- Regulations preventing good local food from being accessible to all including the poor
- Authorities / bureaucracy and fragility of small initiatives
- Companies = power and control
- Centralized supply systems

Possible solutions:

- Organic technology important in most projects
- Function combination is essential
- Permaculture tech & philosophy
- Agro & eco touch
- Agriculture as a means to social transformation
- Need highly applicable, practical research

Issues of scale:

- An addition to small scale: large scale
- Small scale or large(r) scale approach, how to get from small scale to broader areas
- Disconnection between different scale levels
- Big or sustainable? It may take both

Issues of the food system as a whole:

- Repeating or recreating patterns that lead us to food crisis in our "solution"
- The meat problem – increase consumption
- Excess of production, but the food is not on the plate
- Food miles
- Food safety requires total quality chain, is mixed up with local production, big volumes are needed for food safety
- Without systemic change there's not a lot of money to be made – or opportunities for agriculture to become an economic driver
- Use food to change other things

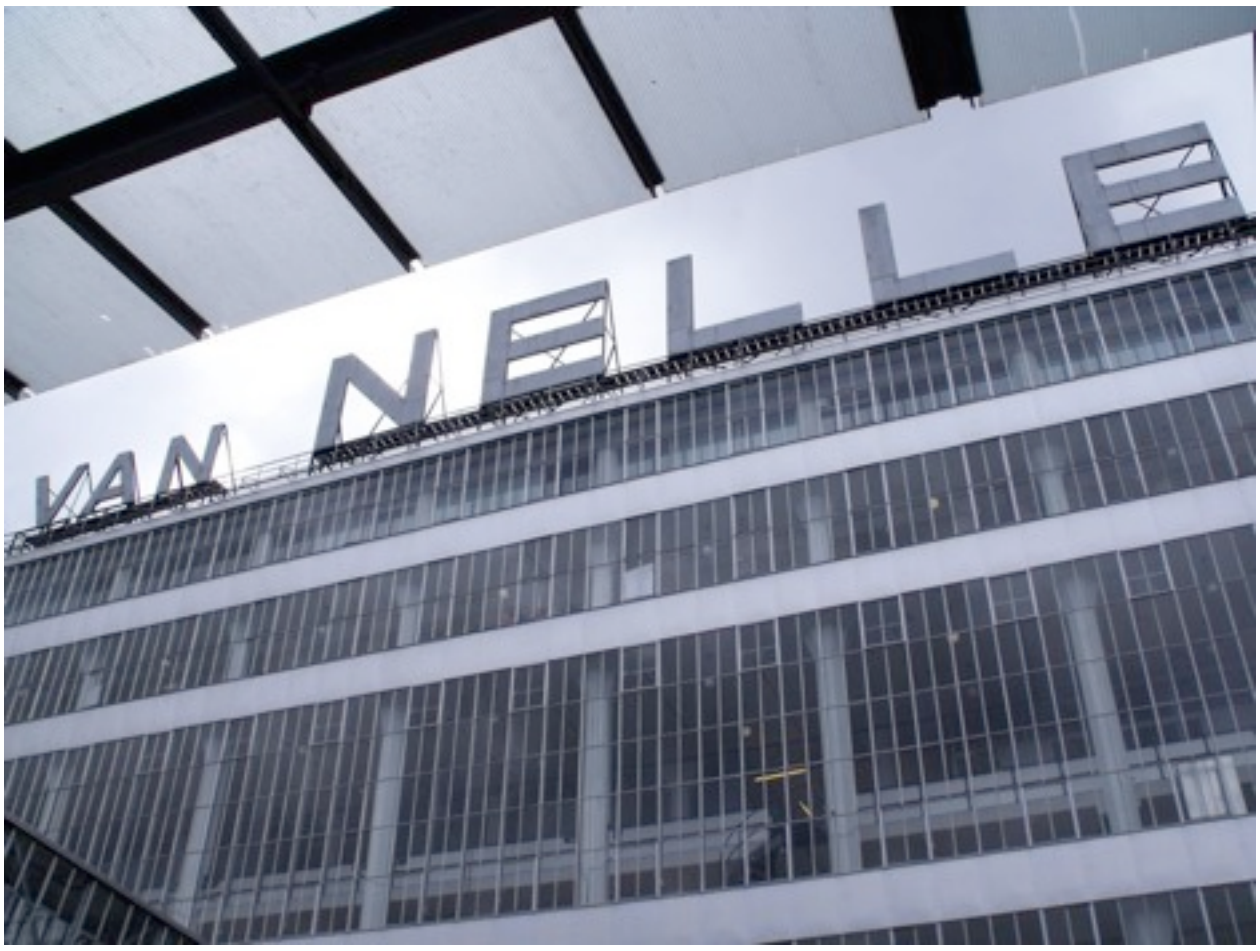
Issues on learning and education:

- Need for education about where food comes from
- How do we create a demand for good food?
- Youth and children engagement in process of changing behaviors
- We're talking about points of production not about chains and networks

- Agreement that food system as we know it isn't working - thread runs through all different areas of social inequality
- Overwhelming big issues, recognition of impact, it is universal
- Farming systems are mixing
- Food is an element of metropolitan and economic development

General issues

- Actions are very similar (e.g. engaging stakeholders, solutions to problems)
- Amazed by the complexity of it
- Lots of enthusiasm, lots of information
- Diversity of realities and similar problems
- Slow and continuous processes


VAN NELLE

Seeing the System Part III: Seeing with Fresh Eyes

After a morning of learning from the people "in the room" and building our collective understanding with each other, participants undertook a Learning Journey; a physical trip around the "system" where a team travels together in order to immerse themselves in the issue they are trying to address, allowing them to see it with fresh eyes through the experiences and perspectives of others.

How does a Learning Journey Work?

If we merely sit where we are and survey the system we are part of from a constant place then we will never gain the deeper understanding necessary to effect transformational and sustainable change. One of the best ways to build that understanding is to go out into the world and change our frame of reference. Shifting how we see a problem situation — from the inside looking out, to the outside looking in—enables valuable insights to emerge.

Each group visited at least two locations.

On the way to the first visit the facilitator asked the group to do some reflection and some sharing in pairs on the bus. For part of the drive, they asked the group to be silent, spending that time noticing the characteristics of what was passed en route to the visit. What was there, what stood out, what were you seeing that you might not have noticed before?

The groups appointed a greeter for each of their visits. This person introduced the project and the group upon arrival. The Greeter also thanked the host(s) at the end of the visit.

Instructions for the Learning Journeys included:

Turn all cell phones off and be completely present to the visit.

Listen and observe carefully. Pay attention to both what you see and what you don't. Listen to both the words and the "music." Take notes as you need for your own use. These notes should capture your key insights and key quotes (in the hosts' own voices).

Ask questions of the people you are visiting; pay attention to their thinking and feelings. Also, notice your own thinking and feelings: your reactions, judgments, projections, etc.

Listen from "within" the people with whom you are talking, with empathy and without judgment. It's not about what you think their story is—it's what their story really is.

Access your ignorance and cultivate a sense of wonder.

If possible, split up and walk around to talk with more people. Remember that whatever unexpected things happen are all a part of the learning journey.

When you get back on the bus to go to the second location—spend ten minutes in silence. Reflection is often deepened this way. Please do not begin "chatting" or checking voice mail, email, etc. Then, talk together as a group:

What stood out for you during the visit? What did you see, what did you hear, and what did you feel? What surprised you?

What did you notice about your own "noticing" during the visit—about your own thoughts and feelings and those of the group?

Learning Journey #1

Green Care Amsterdam

The starting point for Green Care Amsterdam is the potential of agriculture and the landscape around cities to contribute significantly to the well-being of urban citizens. In Green Care Amsterdam agricultural farms commercially offer recreational or work-related activities for psychiatric patients, people with learning disabilities, (former) drug addicts, youngsters with behavioral problems, burntout an elderly people and social-service clients. A new business called Landzijde was set up to facilitate care activities on existing farms in addition to their agricultural activities. Landzijde functions as knowledge centre, matchmaker and developer for clients, farmers, health care organizations, medical insurance companies and the municipal government.
www.landzijde.nl

MarQt/MyFarmer

Farmers in the vicinity of Amsterdam have joined forces in MijnBoer (MyFarmer). They collectively offer their products directly to the consumer via alternative distribution channels. One of the distribution channels is the new supermarket formula MarQt, where farmers sell their daily fresh products. This establishes direct contact between the producer and consumer. MarQt recieves a percentage of the farmers' sales. In addition consumers can consult a website to see where their products come from and are invited to the farms for demonstrations.
http://www.marqt.com/?p=about
http://www.mijnboer.nl/home.aspx

Participant Notes

- How do we minimise logistics (small scale)?
- Like to invest in product development. Value added (needed for better on farm prices)
- My Farmer is a brand
- LT Relations - Farmers - LT Relations to buyers
- International sourcing important with fair prices - short chains
- MarQT is a brand for health
- Supermarket is over the top for some people
- City farm - Green care. City owns land
- Lonside foundation owns and saves farms for social programmes: addictions, psych programme, new money in
- Future for farms - to solve city problems
- School at farm - 100% 11 people
- Sold 3 million euro - 50 farmer - my Boer - 5 million euro
- Out of home 1.6 billion euro
- More effort, closer to own
- School - training schools for farmers, language skills
- Regulated systems not good, self employment, new method
- High percentage stay with, only 5% quit (5 out of 112)
- Low stimulation - people needed
- Move to offer job to clients (big step)
- 1 year through steps
- Care farm wholesale, small coop, national breeding, resulted in My Farmers
- Farmers in city put deals together
- Sale was good for dutch farmers
- Idealism - more than that
- Risk (148,000 euro)
- New kitchen for students to learn culinary arts
- Connects to other farms
- "have to allow people to think in a different way"
- World market - Farmers
- Other farmers - related to city - do business with this group
- "Let them work and learn, let them learn and work"

Learning Journey #2

Rondeel – Chicken farm

The Rondeel is a unique chicken-husbandry system that responds to the public demand for animal welfare, food safety and animal health. The concept takes into account jointly formulated criteria with respect to the environment (reduced ammonia emission), chicken welfare and health, harmonization with the landscape and the wishes of the poultry farmer. Thanks to the cooperation of the Animal Protection Foundation, this new housing system for laying hens meets the highest animal welfare standards. The eggs produced in the Rondeel are being sold in one of the bigger supermarkets in the Netherlands.

Participant Notes

- 28000 eggs are produced every day
- Highest animal welfare standards of the country.
- Admiration for the entrepreneurial spirit and for the velocity with which the project became a (successful) reality on one side.
- Doubts about the real benefits of such an enterprise on the other side. The company is based on several improvement of conventional intensive farming, without looking into deeper facets of the sustainability of the company (such as packaging, feed, nutrient recycling, integrating different products)

Com.wonen

This project is run by the Dutch housing organization in an area that is going to be developed for housing in the city but is now temporarily used for agriculture. Agriculture and green space are two of the main design criteria for its further development. In their vision, agricultural activities are the key to a better social cohesion, a healthy living environment and can have an important educational function for children in the city. The urban vegetable patch is part of a big project called "Healthy cities", a partnership of a construction company, an elder care company, a housing company, a health care company. The project started after the realisation that in Rotterdam, on average, people die 2 years earlier than in the rest of the country, due also to poor nutrition.

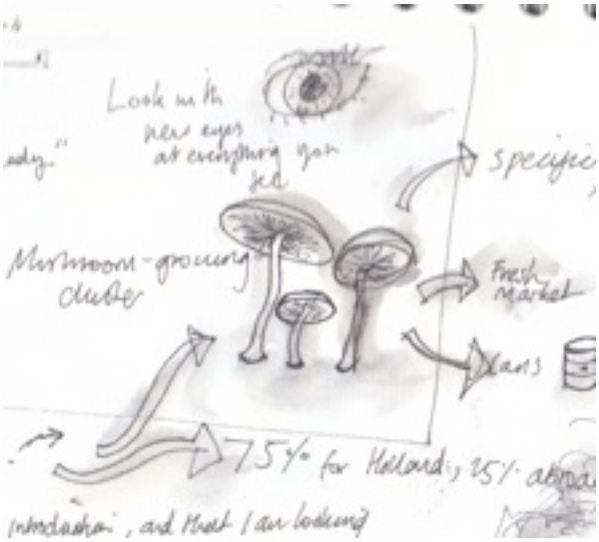
Participant Notes

- Growing garden on a plot where houses are going to be built in 2 years
- First of this kind and hopefully it will be integrated in the company strategy in the future.
- 12 women housed by Com.wonen (social housing) farm the plot.
- Many achievements in the last year (45 different crops, meals, fun, neighborhood involvement...) but also problems (conflicts, weeds invasions in the summer holiday, when the Turkish volunteers, two thirds of the total, went away for a few weeks).
- We liked how such an initiative was made a reality by the determination of a small group of people, but also amazed by the potential this approach could have for the neighborhood and for the company, which houses hundreds of households.

Learning Journey #3

Greenport "Betuwse Bloem"

In the Betuwe region in the Netherlands, five horticultural areas operate in close proximity to eachother. There was little cooperation between these areas however. With the initiative of Greenport Betuwse Bloem (Betuwe Flower) different stakeholders see scope or logistical opportunities (collective transportation), energy flows, high-grade landscape to be utilized more effectively than present. This cooperation strengthen the region's horticulture in terms of profitability while at the same time helping preserve the typical landscape and the quality of life in the cities around the region.



http://www.greenportbetuwsebloem.nl/projecten.asp?id=9

Participant Notes

- Compost grown specifically for mushrooms, made from horse and chicken manure.
- We watched a video about the process from compost > mushroom production> distribution

PlantLab

PlantLab's mission is thinking up and achieving sustainable and inspiring progress in the cultivation of crops. For optimum production and growth plants have specific requirements of their growing environment. The ideal mix of water, light, nutrition, CO2 and temperature is only available to a limited extent from nature for part of the year. Globally only some of the climate zones are suitable for plant production whereas the world population and the relating demand for food is increasing. Within PlantLab all interests and stakeholders are actively involved in an open process in order to use the powers of nature with all available technology and knowledge. In collaboration with business partners and consumers this creates special and varied projects and quality rich products.

http://www.plantlab.nl/

Participant Notes

- Plants use 9% of their growing capacity, can we harness the potential of the other 91%? This is an economic opportunity and business model.
- What does a plant need for optimal development? Is this a way to feed the world's hungry people?
- GOAL > R&D > PLAN > BUILD > TECHNICAL SERVICE

Learning Journey #4

Green and the City & Mainport-Greenport

Two regional projects focusing on Midden Delfland will be visited on this Learning Journey. First, Green and the City concerns extensive agriculture and its relationship with the surrounding cities, Rotterdam and the Hague. How can we involve residents of these cities and make them responsible for the green around them? Mainport-Greenport deals with sustainable development of intensive forms of agriculture in this region. It includes a visit to an innovative greenhouse facility that uses biomass and CO2 as production facilities.

Learning Journey #5

Het Groene Woud

The Groene Woud (the green forest) is a green area surrounded by several larger cities in the south of the Netherlands. It functions as a green corridor for those cities and is characterized by multiple unique and small agricultural activities. These agricultural activities give the area its special character. The cooperation Het Groene Woud is a collaboration between all these smaller agricultural activities.With the groene woud-logo, the products from this area are branded as local, environmental friendly and preserving the typical landscape. This learning journey visits two of the activities: the Philips Fruit garden, a fruit garden and restaurant, which sells and serves their own products in the vicinity of Eindhoven. www.philipsfruittuin.nl, and the Spelt grain brewery, an authentic brewery of special 'spelt'-beer. www.graangoed.nl

Participant Notes

- Host started in 1997 out of his kitchen, now owns a brewery, won a an award for Hero of the taste. Is sourcing all things regionally
- In talking about the brewery he said nothing makes him happier than seeing his customers sitting in his tasting room enjoying his beer
- In talking about the regional cooperation "we try to listen to each other to make the same future , not talk over each other but listen, its people who want to create the same environment"
- The love and pride these local entrepreneurs expressed about their work
- The importance of the story attached to each enterprise
- Importance of place and local/regional networks
- Conflicting opinions about hunger in Holland
- Connection and history to the land

Learning Journey #6

Improvement Centre

The Improvement Centre is a practical centre for research and experiments on optimal cultivation processes and techniques. It offers the possibility to test parts of the cultivation processes for horticulture under perfect conditions. This makes it possible to achieve an exact estimate in advance about the effect specific and new techniques, products and innovations will have on a larger scale in a production greenhouse. An example is the combined production of tomatoes and tilapia under most efficient conditions.
http://www.improvementcentre.com/Frameset%201280.htm

Particpant Notes

- Intensive production may not be sustainable
- Water effecting energy and usage
- Could be answer to having problems in India
- Flood and draught issues / controlled environment
- Could be answer to food inflation
- Onput use efficiency
- Will it be possible to produce enough food with these high-tech methods
- What do you lose when you don't grow in soil?
- Trace elements? flavour and nutrition
- 90% of high tech production goes for export in the Netherlands. Optimistic presentation - negative connotations - two schools of belief - social and high tech / connections w/people

biet&boon

biet&boon constructs and maintains urban market gardens where local residents and institutions, like schools, sports club, and youth organisations will participate in the production. The market garden will bring fresh produce close to people in metropolitan areas as well as bringing people together. It addresses social, education and health issues, and last but not least, contributes to sustainable urban development. Our first market garden will be built this winter in Rotterdam Heijplaat, a small suburb at the border between city and harbour. The first production will start in March, if the weather conditions are right. During the learning journey, we will make a walk through Heijplaat, and address all the issues related to this project.

Participant Notes

- At the biet & boon town, enjoyed touring the harbor of the town and the social context
- At the improvement centre, it's so high-tech it takes the joy out of production
- employment issue - opportunity cost. How much do they pay the 12 laborers at the employment centre
- Contrast in the two stops between social component and high-tech production environment. Quite a contrast
- Food manufacturing - using social, risk and loss of connection with the land and conservation of the land. Impressed w/how successful the high tech production was.
- Tech = useful - want to connect people to the land, however. Where can these two concepts meet? Where is the middle ground?
- Admire the efficiency of the improvement centre / fascinated by technology
- Resistance to industrialized production
- Is there a choice when we need to feed the world?
- Deal w/emotion - resistance to pure technology
- Urban village vs intensive production - how to link?
- Why does farming need to be romantic? Change view of agriculture?
- Discussion - how many centuries have we been improving our food systems
- Selection of genes for optimised production
- Health give and take - effect on human body?
- Diversity of needs available now vs in the past
- Bringing the production of food to address human condition
- Balance of technology and emotion
- Energy motion - emotion contrast
- Can apply both efficiency & social context?

Learning Journey #7

Streekselecties

Streekselecties ('local selections') focuses on the production of high quality local food products and the distribution of these products to local supermarkets. The products are distributed under a special brand, which informs consumers about the product and the farmer and showcases its authenticity, craftsmanship, and the passion that went into making it.
www.vangijs.nl

Childcare at the Farm

Close to the city of Tilburg in the south of the Netherlands, childcare and agriculture is combined at Childcare at the Farm. Working city

dwellers bring their children to the farm during the day. The children play and learn about the farm while the farmer has an extra income that ensures the agricultural activity and green area close to the city. In this way both agriculture and the city benefit from each other.

http://www.kinderopvangtierelier.nl/

Post-Learning Journey: Dinner and Debrief at Local Restaurants

The debrief was the most important part of the Learning Journey. It is essential that it happened in a structured way.

Dinner was also part of the learning journey. Participants were encouraged to be mindful of their meals.

What did we notice about the menu, the food, the people you came into contact with, the restaurant?

30 SEPTEMBER

Morning Plenary

In order to share some of the stories of the people we visited on the Learning Journeys, we shared some of their words through direct quotes.

"I shop at this market because the vegetables taste better. I try not to think about price but I know that the food here taste like the vegetables where what I buy at a supermarket they taste like water"

- MyFarmer customer

" We try to listen to each other so we can make the same future"

- Owner of the brewery in refering to the local economic network they are creating

" When I see a group of people in my tasting room drinking my beer I am happy"

- said by brewer

"We told the banker when we were trying to get the loan to build the pancake house that sometimes one plus one equals three"

– the manager of the apple orchard when describing how sometimes there are additional indirect benefits to social initiatives

" when buying things regionally the money passes through the local economy 2–3 times"

- said by the person setting up a regional network of producers and entrepreneurs

Building on our Learning Journey experiences together, we asked; what's really happening in the system? How will these insights help us move our work forward more effectively?

Provocation from Jan Kees Vis (Unilever)

Jan Kees Vis is Head of Sustainable Agriculture at Unilever. During his provocation he gave his view on the food system, sustainable development and metropolitan agriculture. A selection of the topics he discussed:

The system is largely self-organizing; do we need a grand design? And if we do, who should do that design?

If so, how to make sure people implement it? In other words: does the system need regulations? How do you choose between different levels of technology?

What are we trying to solve? Food security, poverty or waste...?

Should ethics take part in these discussions? Whose ethics are they going to be? Is there a level of ethics that we can all agree to?

"Unilever will source from only sustainable suppliers by 2020"

"The question of Metropolitan Agriculture is: how are we going to feed 4 billion people living in big cities in the near future?"

"How do you chose between different levels of technology?"

Are we trying to solve food security? Hunger? Poverty? Waste?

"Hunger and poverty were among the things that Unilever is trying to solve"

Should ethics play a role in the discussion. If they do then whose ethics are they?

Can you influence consumer preference through ethics?

Do we have to link producers and consumers?

Concurrent Conversations with MetAg Champions

The concurrent conversations on Metropolitan Agriculture took place in different locations across the Fabriek.

The Potential of Metro Ag for Food Security—hosted by Dr. Rudy Rabbinge, Wageningen University, Netherlands and Florian Kroll, food security and environmental researcher and consultant, South Africa

- Historical perspective / food policy / falling back on values, skills and history
- What are we learning on a large scale, adaptable to food systems ecology? A small scale can be more viable than large scale
- System does provide food security to many
- Dramatic change - working with private sector
- Charge from supply to demand structure
- Rice systems programme
- Major places: Chinese Agri, Brapp?a Bligual? Land Bank in U.S., Wageningan in Netherlands
- Relationship w/university - in S.Africa, extension services are gone
- Political will to make change
- 1.5% of tomatoes in large greenhouses are waste - when asked to respond; owners denied using surplus to 'repurpose'
- Food insecurity is changing - policy on national level
- S.African sales poor - more need, but there are a mixture of farms
- Willingness of banks to invest is?
- Actual yield is still less than adequate inputs
- Make value added products
- Suggest policy to prevent adaption of 'American Diet'
- Mediterranean diet is better / meat consumption / Italian (Olive, garlic, fish)
- Public health element - more healthy consumer
- Food production to added health issue in Australia

Business Models for Linking Smaller Producers to Metropolitan Markets—hosted by Dan Carmody, Detroit Eastern Market, USA and Jan Kees Vis, Unilever, Netherlands

- Role of middle person between grower and consumer is important, play a role in marketing the value of the product, maintain integrity and educate consumer
- Need to build foundation of similar values for the relationship between producers and suppliers (global standards!)
- Need for better market research and market information to understand demand
- Develop diversity of markets for producers and consumers
- Change people's relationship to food and between suppliers and consumers
- Need to create demand and grow the supply together
- Create a social movement to promote local farmers and locally produced food

The Role of Reflective Learning in Practical Metro Ag Innovation Projects—hosted by Dr. Chris Peterson, Michigan State University, USA and Jan Kees Vis, Unilever, Netherlands

The MetroAg staff has learnt a lot during the projects in the last few years. Chris Peterson reviewed over 30 projects, and looked at what distinguishes a high-performance project from a low-performance one.

All the projects intended to operate under 5 common principles:

1. **Sustainable Development (SD) is a dynamic process.**
   "Don't spend 3 years trying to define SD, the concept itself will change in the meanwhile."
2. **SD needs system innovation.**
   "People will do something new in the project"
3. **System-innovation is a non-linear process.**
   Conventional projects start with a problem definition, then a solution is worked out, which then needs to be applied. This is not the case of SD as the problem itself cannot be defined. Joint knowledge creation needs to happen, followed by joint reflective learning. These projects are NOT designed to solve problems, but to manage complex problems.
4. **System-innovation involves multiple stakeholders**
   "messy problems, with many people involved"
5. **Multi-stakeholder approaches imply trans-disciplinary knowledge creation**

There were about 30 projects; some real winners, some losers and some in between. There were four performance categories. 75% of high-performance projects found reflective learning important. And 50% of low-performance projects also thought it's crucial, because it did not happen. [he had a table of the survey results.]

How was reflective leaning created?
There was a designated person, to track learning; the process-monitor who was a distinct person from the project leader (who needs to focus on the content and performance of the project and not the dynamics in the team). This person didn't just monitor, but also intervened. For example by 'constantly' asking 'Why?', by this not allowing avoidance.

The process-monitor can use tension for creating understanding of differences. One of the imortant roles is to set aside reflection times; crucial time-outs sometimes in the form of workshop sessions, bringing in an external expert or learning journeys where the team could focus on the process or just spend time together not focusing so much on the project goals.

"Reflective learning is a particularly unnatural act for project groups." Therefore needs to be 'artificially' created.

Comment:
In case of less hierarchical projects, like the MetroAg projects, more of the reflective learning process is needed in order to succeed. Projects were independent, but TransForum could provide some structure.

One of the learning outcomes (of this session): It can help if the process-monitor makes his/her role more explicit; "Hi, I am here to help, not to ask annoying questions." 5

- A culture of reflection enables teams to keep learning, even when it's difficult
- Strategic behavior and and an open mind are two key aspects of that culture
- You need a designated process person in an innovation team because groups tend to get caught up in the content and the doing, despite their best intentions to remain reflective;
  - It helps to make this role explicit and to highlight the benefits of this role to the group - as sometimes they may feel resistant to having process issues identified, especially if these process issues represent "elephants in the room"
  - The process person ideally occupies a role slightly removed from the group, so that they can keep the necessary process perspective
  - The most important characteristic of a process person is that they are able to gain the permission of the group to play this role
  - It can take courage to play this role at times
  - A strong process person will also have content expertise
- Both short term and long term reflections are useful

Business Models for Sustainable Intenstification—hosted by Dr. Peter Smeets, Wageningen University, Netherlands

The host was making a mind map as we spoke.

At the beginning, Peter Smeets illustrates the Nellore Agropark Special Exporting Zone project. There is a vision and there are challenges. The latter come mostly from the need to combine many different actors ("KENGi actors"):

>Knowledge institute
>Entrepreneurs
>NGOs
>Governments

Each has a different "currency": peer reviewed publications, profit, influence, power. Making a project like the agropark work needs to make these interest meet, translate their different standpoints into something they can understand.

The group is mainly of urban farmers, and the presentation suggests a lot of questions on the project and on what small scale initiatives can learn from this work:

- Who owns the byproducts that are exchanged? Typically an independent company is formed, a joint venture between the interested parties. The company's profit are shared and through it waste becomes a valuable product.
- How can a similar initiative be fostered by a government like a U.S. state government? By changing environmental law, land ownership laws (e.g. what is "waste"? can cities own and manage land?)
- What applications similar to this can exist in a situation like Detroit, where there is a constellation of small initiatives? Sharing of infrastructure: composting, manure collection: if garbage collection exist in a city environment, why not this kind of stuff? But, it is noted, large scale is determinant to make Agroparks profitable. The typical size is 400 hectares, 1000 acres.
- Is meat production necessary? The system is made of three components: plant production, consumption (by animals), decomposition. The middle step can be insects (like in Asia or Latin America), can be fish (with aquaculture), can be humans (recovering human waste), but typically poultry/cattle/sheeps is the most easy to manage/market.
- Is the Agropark an energy consumer or producer? It is absolutely producing energy, by not having to move stuff between production, processing, packaging, by biodigestion of organic waste, by the generation of heat, CO2 for greenhouses and electricity together to increase energy efficiency.
- Who pays? In the Netherlands it is the government that kickstarts the initiative, then private investors step in. But funds could come from elsewhere: could funds from the EU Common Agricultural Policy go into optimizing agriculture system in this sense?

Integrating Agriculture in Urban Spatial and City Planning—hosted by Kathryn Underwood, City of Detroit, USA and Marco van Steekelenburg, Province of South Holland

- Importance of concepts of scale - 1) frame and grain 2) different levels
- MA lease: radius of 300 km with 3 million people and 50 % land use in agriculture
- 70 regions qualify for an MA-rigorous another 120 regions are exporting to MA regions

Q1: Urban vs Metropolitan Agriculture - focus on all 3 p's: next to planet also profit and people. Triple bottom line

Q2: High social component of urban ag in Detroit, profit comes in how: wit money for large scale greenhouses

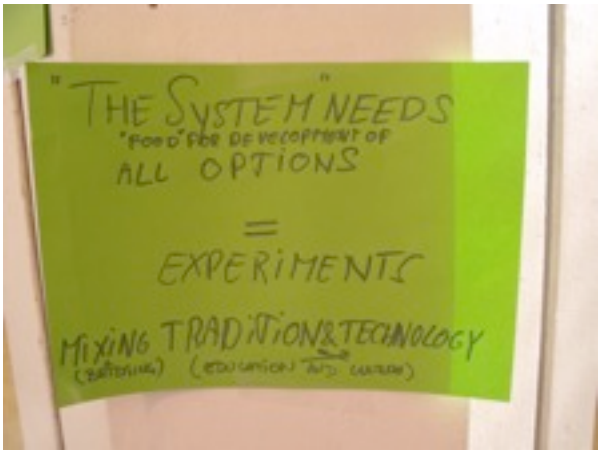
Q3: urban ag and health: looking at cities at healthcare environments

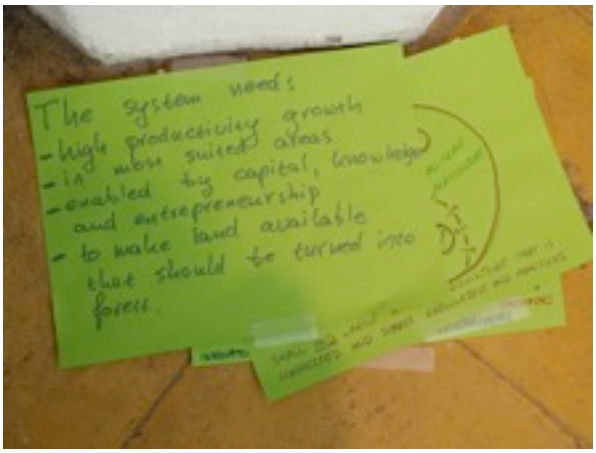

1st Global Summit
on Metropolitan
Agriculture

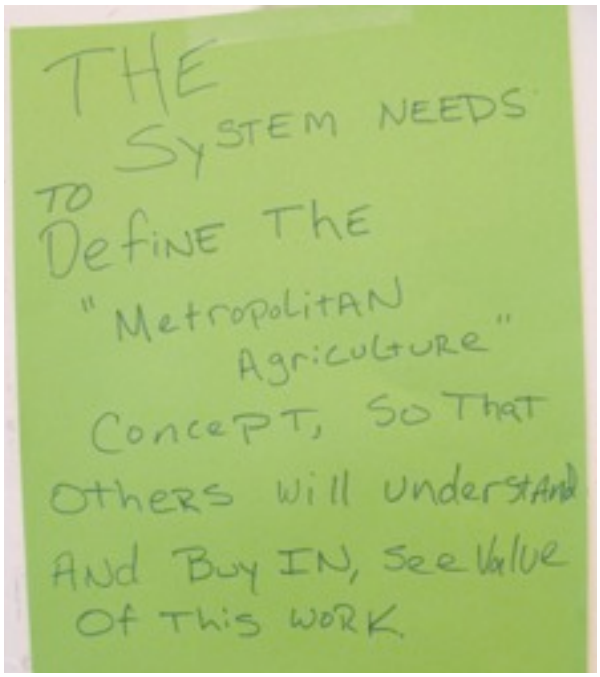
What Does the System Need?

After spending the first day and part of the second day "sensing the field", the facilitators posed this question to the participants. Working in small groups, the answers included:

- A unifying vision and SPACE; we see it as a big tree
- To define the "Metropolitan Agriculture" concept; so that others will understand and buy in, see value of this work.
- Food: for development of all options = experiments and mixing tradition and technology
- Capital, knowledge and entrepreneurs for high productivity growth in most suited areas to make land available that should be turned into forest
- Food that moves around the world and food that stays put
- People who are conscious about food and understanding of it's culture in both space and time
- Understanding that we need both big and small, with power and love
- Marketing, branding and education to effectively communicate the value of local food to people
- To bridge the gaps between consumer and producer (mental, spatial and distance)
- Shared intention and scalable innovation
- Increased awareness of the consumer and producer so they make choices about our food system that balance social, ecological and economic capital.
- To be inclusive and allow for variations in approach to agriculture
- Shared awareness that there are barriers that can be overcome by flexibility, creativity, passion, freedom and connection
- Global connectivity to strengthen the diversity and best practice of local communities
- Change consumer's values though education, training and communication that allows confidence and truth to emerge
- Feedback loops starting with 'people first'
- Greater diversity of approaches and scales, consumer information about products, interaction among stakeholders, appreciation of shared goals, open to innovative ideas.
- Local and global optimism
- Work, education, diversity, recreation and innovation







Plenary Provocations

Florian Kroll (South Africa)

"hear no evil, see no evil, speak no evil"
(Yoda, Florian's t-shirt)

Why does Johannesburg have a 95% failure rate of urban agriculture projects? Florian pointed to the following reasons; people need roofs before they need food, so if there is a space the owner is more likely to build a shed and rent it out than grow food. Also, in city budgets the agriculture voice does not come very high. Lastly, funding comes mainly from Corporate Social Responsibility, so is often allocated according to PR mechanisms.

"If we don't take care of food security we are threatening the fabric of our society"

"How do we bring home what we saw here?"

"We might have the greatest ideas in the world, but how do we communicate them in the right way to the right people and at the right time to really make a change?"

Florian pointed out that the risk of not addressing food security was seen in 2008 during the food riots.

He gave the example of Project Siakan by Professor Michael Rudolph that runs health promotion; ecological health that has social and environmental effects.

In the policy framework, we need to include the technical capacity, consumers and networks to connect people socially.

"How do we adopt and translate what we've seen here for our local context. How do we get in front of the right people at the right time?"

Kathryn Underwood (Detroit/Flint)

Kathryn spoke of a balancing act of issues and interests, or 'building the bike and riding it at the same time'.

There is a lot of potential space for agriculture in and around Detroit, Kathryn preferred not to call these spaces 'vacant land' but 'open space'.

She talked about the 1200 urban gardens or farms, most of which are going under the radar of the city regulation. The city has to grow as it expands, and urban agriculture wasn't taken seriously until someone came in for $30 million city farm.
There is a 'temporary versus permanent' debate; many say Urban Agriculture should be temporary until something better comes in.

Young educated African-Amercian hipsters with low incomes have different visions for the same neighborhood, which clash at times.

There are environmental and contamination issues

"What is the economic benefit of Urban Agriculture?"

Decio Zylberstajn (São Paulo)

"Why have we chosen to live in cities?"

New Roles of Agriculture: food, fuel and fiber. We need organizational mechanisms for cooperation.

Global Trends - we have fading boundaries on many fronts:

- No more rural and urban; it's now something in between.
- 1st, 2nd, and 3rd sector companies; fuzzy boundaries because NGOs are more like companies.
- We are detached from natural cycles.
- Eager for quantity not quality- demand for higher quantity.

Open Space Marketplace

Here we asked what conversations needed to happen now? What questions sparked interest? What did we need to hear more about? What couldn't we leave without talking about?

Detroit/Flint Food Shed Group: Detroit/ Flint: What's Next?

Key Insights:

- Value in multiple perspectives on the work
- People feel there is value in continuing with work that has shared interest in the group
- New, have a lot of work to do to figure out how we function and develop a mutual respect on all levels
- Challenges faced on multiple levels (local to international)
- have the power & love in the group

Next Steps:

- Further policy and systems work
- Determine common areas of focus
- More structure, establish process, facilitation
- Defined approach for working together
- Asset mapping

What help or support might this group need from a global community?

- Harness the power, money and influence here at the summit
- Having an additional systems training on facilitation for w/in and w/out
- North Star reference; use this as our compass
- Vehicle/mechanism to keep connections

Connectivity - Communication About Local MetroAg Initiatives

Key Insights:

- People like parties, presents, fun, humour and food: Use this to mobilise them
- Show practical examples of existing projects
- Create a (crosscultural) strategic alliance to form the 'promotion'
- Respect, don't sacrifice or compromise your ethical credentials too much

Next Steps:

- Reflect and take a step back to decide
- Digest all the new experiences

What help or support might this group need from a global/local community?

- Enthusiasm
- Excitement
- Experiential learning

Setting an Agenda for Capital Funding of Global Metropolitan Agriculture.

Key Insights:

- Green projects make money
- There is a need for funding innovative projects outside normal banking models
- The strength is in our team (Ekbai), TransForum international, Advisory board
- This is the next logical progression for TransForum

Next steps:

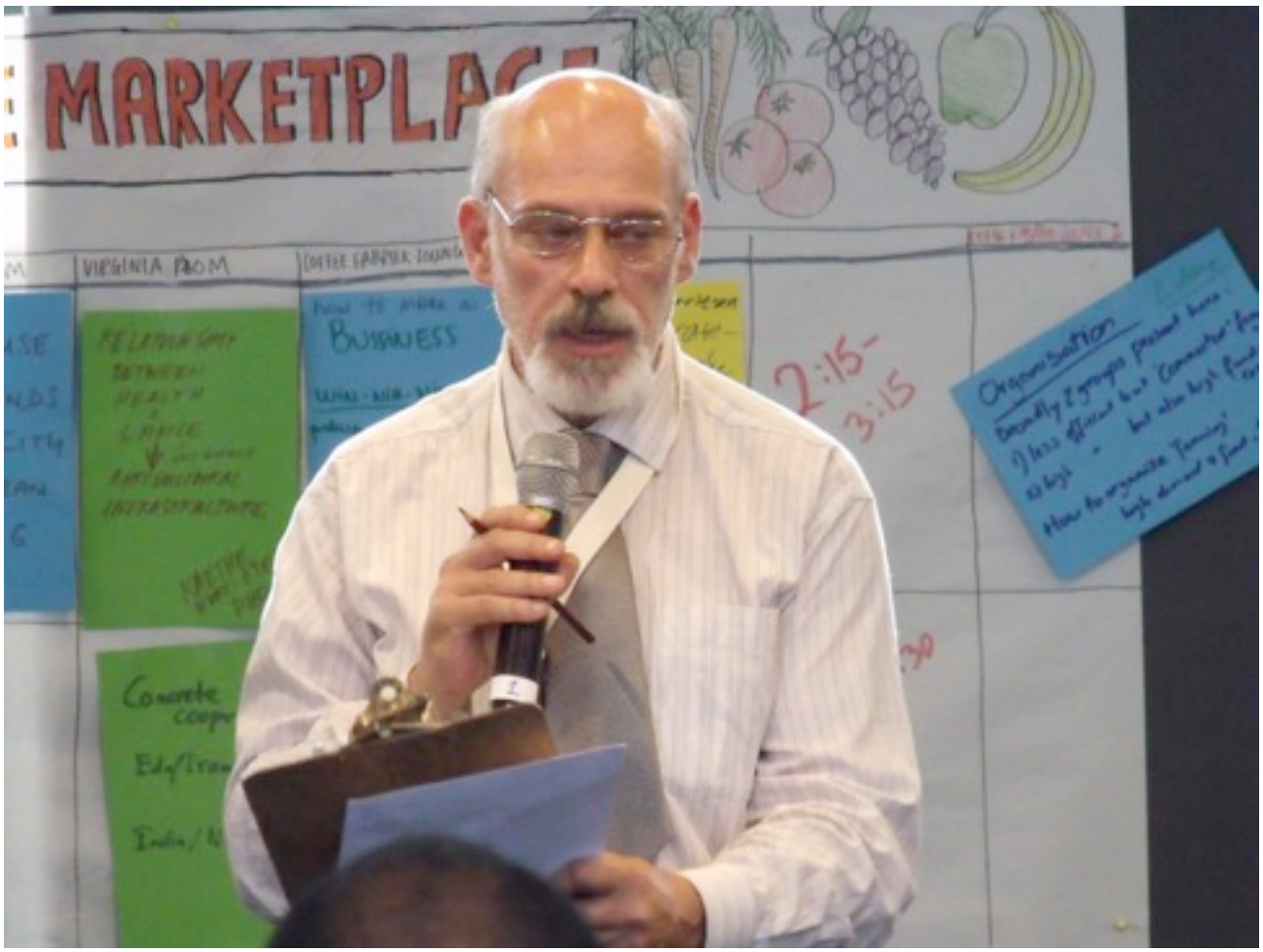
- Convene electronically in next week to set the stage
- Convene electronically after that to frame investment agenda
- Set a deadline of march 30th for final draft proposal
- Work in conjunction with non-profit 'seed' group - deadline is June 30th

What help or support might this group need from a global community?

- strength of advisory committee from TransForum
- We will tap into database of existing Ekbai network
- Support will be needed to connect each country to specific resources for specific collaboration

How To Use Wastelands In The City For Urban Farming?

Wastelands have various themes, there's a lot of them, so try to make plans with owners for the benefit of city-inhabitants.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OPEN SPACE MARKETPLACE

Key Insights

- Indian government giving seeds for free for rooftop farming.
- Every city has it's own specific spaces, wastelands and city density
- Squatting is a good way to use a ground
- building a shet on greenhouse demands legislation
- See your own grown vegetables every week to customers and combine this with other urban farmer harvests
- Could you grow vegetables on farmer waste-piles which are packed?

What are the next steps?

- Get grounds in use
- Make a map of possible locations
- Squat if necessary or make a bigger schedule plan with building companies that own wastelands, social housing organisations or local government.
- Make plans to profit from urban gardens, for the benefit of the owner

What help or support might this group need from a global community?

-There is a website coming up from the EU funded international workshop in Berlin (this week). This site will platform the urban farming projects throughout Europe. Filling the site would be a great help!

How Do We Know What Consumers Want?

Key Insights:

- Possibly big retailer wants to inform urban farmers on what people buy/eat
- group of farmers can organise open days/ harvest feasts where agriculture = FUN. Then talk to urban people.
- Some quantitative market research is welcome
- Website where producers and consumers can debate
- Farmers go to a shop and debate with consumers

Strategies for Metropolitan Agriculture in the Chennai Region of India

Key Insights:

- It is very important to take away risks for investors in Metropolitan Agriculture as a developer
- Co-invest with the first movers
- Arrange permits
- Involve current farmers actively - ask them for their needs
- Do a lot of marketing / publicity campaigning

How To Make A Business Win-Win-Win-Win Between Producers, Distributors, Consumers and Nature?

Key Insights:

- It is difficult to make producer-distributor-convenor-nature come together
- How to define a fair price for consumer and producer

Next steps:

- Find a way of communicating about "fair"/ organic produce

What help pr support might this group need from a global community?

- Advice from experts
- financial support

Grantmaking Agencies

Key Insights:

- This session's topic seems linked to Gary's!
- Grant makers/donors could support

Next Steps:

- TransForum International Advisory Board (1st October 2010)
- Set up a drafting team to draft a set of funding proposals
- Seek seed funding for building a platform to institutionalise the network capital (Innoversity) with a view to establishing a MetroAg agency

What help or support might this group need from a global community?

-We're building it! The willingness to belong to 30 June 2011

Role of Higher Education in Supporting Metropolitan Agriculture Movements

Key Insights:

- Focus on action learning (not traditional research)
- Focus on communities of protection, but create a structure for doing so
- Mission-driven agenda - Science for society
- Innovation-focused - exchange orientated = training/access at multiple H.E. levels
- Umbrella structures - hosting, dialogue, sharing, conferencing, practice
- Virtual

Next Steps:

- Seek international collaboration on key issues affecting us back home
- Explore own role in support of metro-ag
- Define the innoversity principles, values, approaches, success criteria
- Establish a mission-driven agenda - society driven agenda
- Create interim government structure, inclusive of X sector engagement
- Create an organisational planning group - laying out the network and implementation plan for evolving the future
- Create a final proposal

What help or support might you need from a global community?

- Time and resources for organizing the group to work
- Cities satisfy a minimum criteria for inclusivity/ involvement - represented by a regional action plan

Global To Local

Key Insights:

Well-designed:
Intensification of agricultureal production in and near cities can deliver co-benefits including local social benefits and global environmental benefits.

Balance:Integrate
Allocation of resources between artisanal and intensive Metro Ag.

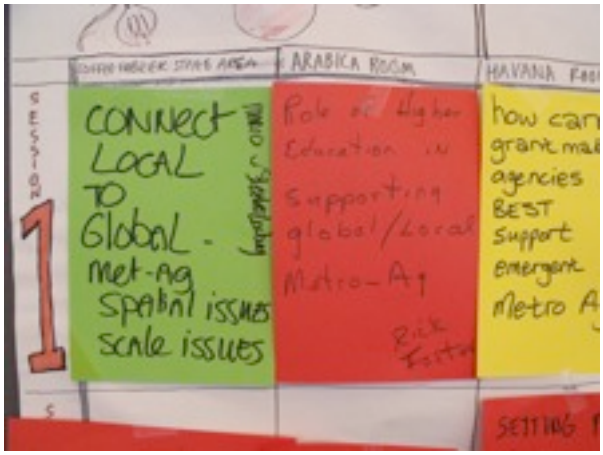
Intense local products
Opportunity to use components of Metro Ag where they already exist near cities (waste, capital, heat, nturients workers… knowledge

Next Steps:

Local redevelopment of a city centre vacant space
Regial: delta/historical evolution of a fertile landscape in a future with climate change.
Global anaylysis: Send brief to CGIAR through Rudy (Marco)

What help or support might this group need from a global community?

Keep us informed of peer's progress.
- 1. Graham - seed funding
- 2. Gary - capital funding for global metropolitan agriculture. Collaborate in the next couple of weeks. Put together draft platform. Green projects should be able to make money.
- 3. Silvio - how to make a business win, win, win. Process so interesting of how people have joined me in my business because people have believed it is possible. It is difficult to get producer-consumer together. Educate the consumer. How to define a fair price for consumer and producer.



Afternoon Plenary

Given all of this, what is needed in our cities? What will help us sustain our food and agricultural systems? What outcomes are we trying to create? What would support these outcomes? What do we need from each other to help us do what is needed of us all?

Rebecca Freeth interviews Sander Mager

As the final afternoon of the Summit drew to a close, Rebecca Freeth, one of the facilitators, briefly interviewed Sander Mager from TransForum. Sander was one of the initiators and primary movers of this project.

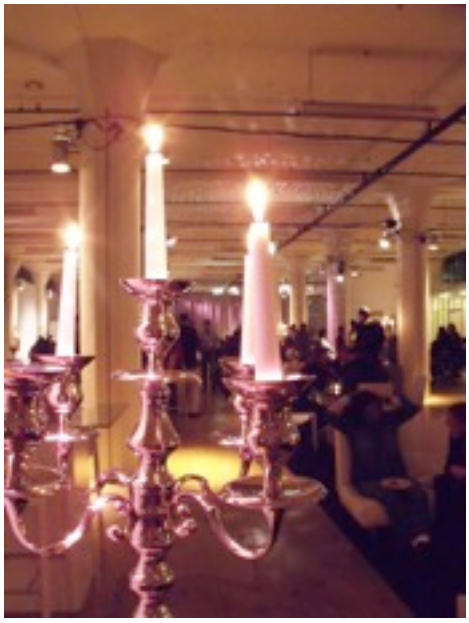
Q: TransForum is a finite project.
What does that mean?

A: Its role was to be a change agent, and it is a good thing for a change agent not to institutionalize itself. There are a lot of people with a lot of personal commitment, who are willing to take this further.

Q: What struck you most during this summit?

A: People talk in a completely different way then when we started; re-framing has happened. Tensions were replaced from either/or to and/and. Should we come up with a definition for MetroAg? Definitions create boundaries but we say we want to cross boundaries. The biggest mistake can be to try and create something huge; what we need is high ambitions and taking the first next step.

Dinner and Summit Closing



FRAMING METROPOLITAN AGRICULTURE

METROPOLITAN AGRICULTURE: MOVING TOWARD SHARED UNDERSTANDING

Vanessa Sayers
Reos Partners, Johannesburg
October 22, 2010

Genesis of the Concept

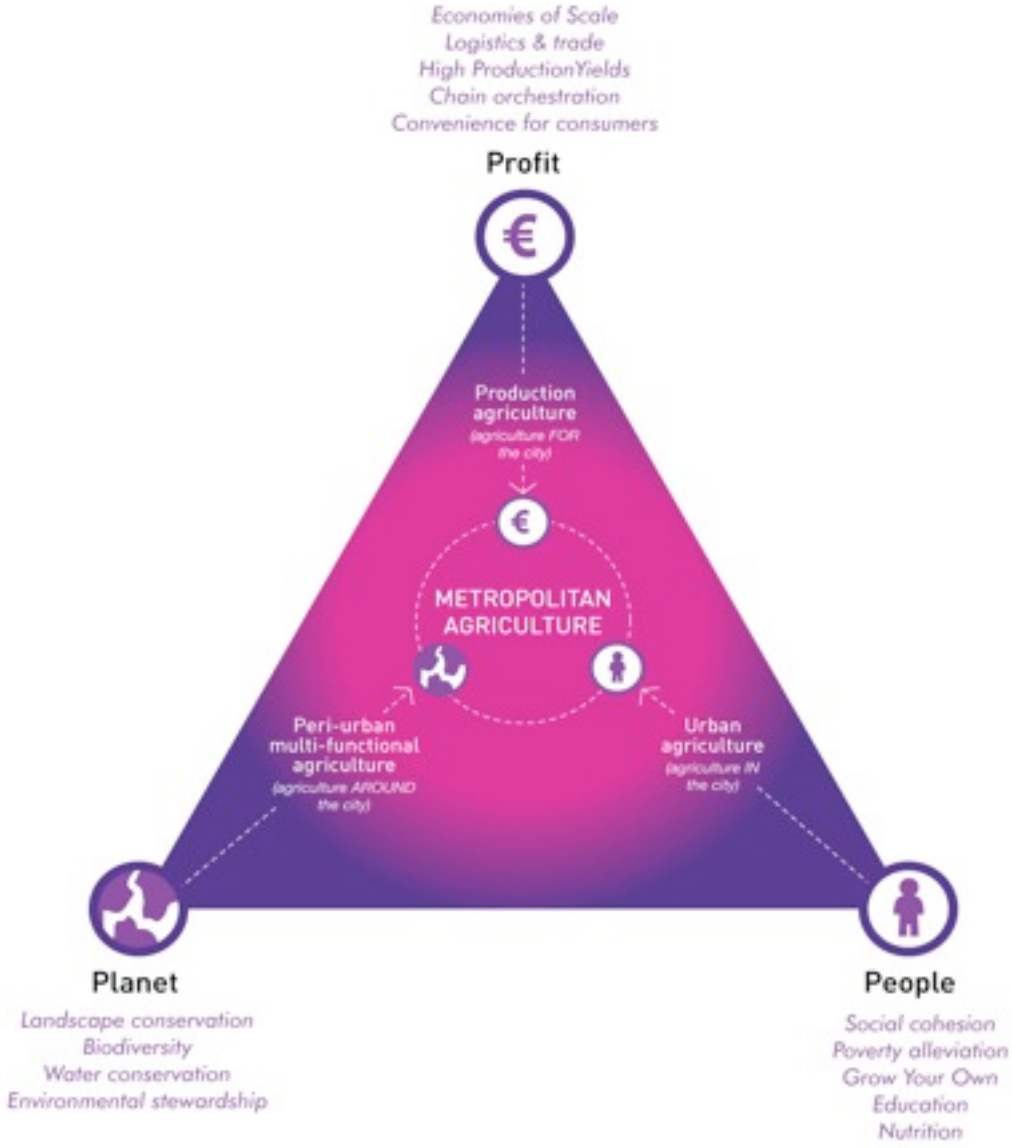
The current working concept of Metropolitan Agriculture has emerged from TransForum's five years of experimentation in the Netherlands and internationally, supplemented by academic research work undertaken by Jeff Stottlemyer of Reos Partners. The idea has therefore been developed within a particular set of contexts.

Over the last year, as stakeholders from six cities have worked with MetroAg, some challenges have emerged. For example:

- In some places, practitioners found it difficult to differentiate MetroAg from the much more widely known practice of Urban Ag, while in other locations people thought it simply entailed very highly productive and large-scale forms of agriculture.

- The breadth of the existing MetroAg concept (e.g., that it addresses various issues related to production and as such might include many different forms of agricultural enterprise) led to varying interpretations and emphases as well as some lack of clarity about what falls in and what falls out of the "umbrella."

- Different localized understandings of particular words (e.g., "Metropolitan") meant that the concept was not always understood as intended.



Purpose of this Report

These issues remained relevant coming into the 1st Global Summit in Rotterdam. Subsequent to the Summit, the team working to take MetroAg into its next stage decided that it would be valuable to interview eight core stakeholders from the cities of Johannesburg, Sao Paulo, London, Chennai, Amsterdam and Detroit/ Flint about the concept, with the intention of:

- Getting a sense of people's current understanding of the MetroAg concept

- Assessing whether this understanding had become clearer or better aligned to some of the core aspects of the concept as it has been described to date

- Identifying areas where there is clarity and alignment and trying to draw these together-

- Identifying areas where there is divergence that could benefit from further work

- Seeing how open people are to having their current understanding shift through further engagement.

This brief report draws on the existing conceptual work and the views of the eight stakeholders interviewed to address these aims. Additional input and quotations have been added from a ninth TransForum respondent.

The interviewers asked the stakeholders three basic questions (some of which were developed further in conversation to draw out more explanation):

- What is your current understanding of the MetroAg concept?

- To what degree has that understanding evolved since you started work on MetroAg?

- To what degree are you open to its continued evolution?

What Are We Talking About?

In the interviews, some people tended to talk about MetroAg as the set of activities already happening in the cities (workshops, networking, etc.) and the intended results; thus, these people were already implicitly focusing on the social innovation aspect of the process. Others stayed focused on intended results; that is people working on projects together on the ground that embody the MetroAg approach. This duality was reflected in the interviews, with some people talking about new ways of working together, some talking about new ways of thinking, and some talking about both.

A New Way of Working Together

Here are some of the comments made by interviewees that reflect a view of MetroAg that involves a new way of working together:

	"The first thing in my understanding is that it's related to methodologies that involve participation, inclusion of all social groups, and the strengthening of relationships between producers and consumers".
	"Looking at it from a societal/practical point of view is the starting point."
	"Six major metro areas might have added value in coming together."
	"Sharing experience about what has and has not worked so we are tackling something with the benefit of what others have done…"

	"A whole new model of collaboration that we've yet to see in a quality way…"

A New Way of Thinking

When looking at MetroAg as a new way of thinking, some interviewees began by describing what the problem is that it is trying to solve:

What is the problem?	
Competition between agriculture and the city	"Farmers were seeing the city as a threat—how can they come to see it as an opportunity?"
	"It's a way out of the polarised debate … with respect to agriculture and the urbanised environment."
Sustainable approaches can't feed enough people.	"The whole thing is about sustainability at scale."
Disconnection of consumers and agriculture	"You get alienation of consumers from the source of food."

But there was somewhat more convergence around the idea of MetroAg as being a new way of looking at agriculture and the city, and of addressing the problems using innovative ideas and thinking:

Thinking beyond the existing boundaries of what agriculture does	"Agriculture can provide services for example in therapy … or through natural ecosystems services … within the city. Those are fairly important functions, and that's a novel way of looking at things."
	"Other services that agriculture can provide"
Seeing agriculture as providing "environmental services"	"Our group is still very much concerned with production and consumption … not with a more general view of agriculture related to … landscape and nature in itself. … I think the idea of agriculture providing environmental services was introduced."
Looking from a "redesign" point of view, not just an optimization (profit-maximizing) point of view	"If you have a redesign lens on agriculture, then you realise that a vast differentiation of values and demands can lead to different types of agriculture … there are hundreds or maybe thousands of new ways of doing agriculture … the bouquet of MetroAg, where every flower represents a different combination of values that is serviced by this new way of doing things."
	"It has stimulated my thinking about what's possible. … By changing how we think about agricultural production in the future … this has let my imagination run wild a bit."
Understanding the city as having a complex metabolism of which agriculture is part	"A way of reconnecting agriculture and the city/ consumers that leads to a more sustainable metabolism of the city."

The focus on new ways of thinking excited some, while others wondered whether this lens was well enough grounded with widely available examples:

The value of an aspirational concept	"It could be a venue for the introduction of new technology, new agricultural systems, and new economic opportunities."
	"You open up a completely new field of potential and possibility."
	"It moved … to it being an aspiration and idea."
That still needs grounding	"I believe these concepts are very good, but you have to ground them … and create some kind of stakeholder involvement as a means of livelihood for some."
	"No one is going to have an interest in taking the concept further without it being rooted in action. I think there needs to be a case for action … at scale."
	"You need to use the TransForum experience to leverage the possibility of others doing this—the same level of experimentation elsewhere."

With Relevance to Context

Most interviewees spoke about the need for the concept to adapt to local realities:

Need for contextual adaptability	"I think creating a concept that makes sense in many contexts and then applying it so that it makes sense in each is important."
	"Detroit/Johannesburg—it would be unwise for them to copy it, but they take the same notion of reconnecting agriculture with its environment to focus on where the real needs are and where the redesigning needs to focus. … It helps you to refocus on what's relevant, and what is relevant is completely context dependent."
	"Each city will have an integrity of its own —the context for which is growing—and food and health and economic and equity issues…"

And a number of interviewees from the southern hemisphere noted how this need for contextual relevance was showing up for them as questions and needs:

São Paulo	"Mainly the issue is related to innovation and technology: land scarcity and climate define different questions for technological development. … If we get too much into this type of technological development here, I think we'd have problems in integrating the social aspects of MetroAg we're working with … the concept must be large enough to contain realities with different factor scarcity (capital or land for example) realities. I don't think we're so much into developing technologies that are so land intensive because it's not our reality here … for us the issues … are related to implementing best practices and developing efficiency in the field and low-cost equipment."
Chennai	"There is a need for supply chain reengineering. This is not true for Europe/USA where it's streamlined, but in these hotspots for consumerism (BRIC), the supply is fragmented and needs to be reengineered."
Johannesburg	"Something that emerged within the Summit [was that] the context in Holland is very different from that in South Africa. In Holland, it is much more capital intensive, and they have way more technology and capital, and the level of skill and education is way beyond what we have here. So for me it is a challenge to see how to apply it here."

What is MetroAg?

Working Definitions

Responses to the question about current understanding of the concept yielded an array of shorthand or off-the-cuff definitions from people. It is useful to share most of them here, as they offer an initial sense of what alignment and divergence exists in content before we delve into detail:

Shorthand definitions of Metropolitan Agriculture	
	"Focus on sustainable food systems in and around metropolitan areas"
	"How we strengthen production, delivery, and supply of food to the cities in as short a distance as possible"
	"Innovative forms of agriculture that are more intensive and responsive to the needs and opportunities offered by the metropolitan context"
	"Sustainable agriculture at scale focused on the needs of consumers in the metro regions"
	"Growing food in close proximity to the ultimate consumer in a metropolitan environment in which food and food health are important … that can be used to supply good food and aid economic development and impact on the energy and climate change scenario."

	"A solution to meet the problems that the urban consumer is encountering today in terms of getting what he/she wants in the right time, shape, and format."

Similarities:

Agricultural activity in urbanised environments:

"in and around metropolitan areas"
"food to the cities in as short a distance as possible"
"in close proximity to the ultimate consumer in a metropolitan environment"

Meeting the needs of the city:

"responsive to the needs and opportunities offered by the metropolitan context"
"focused on the needs of consumers in the metro regions"
"food and food health are important … supply good food and aid economic development"
"meet the problems that the urban consumer is encountering"

Including a focus on sustainability:

"sustainable food systems"
"sustainable agriculture at scale"
"impact on the energy and climate change scenario"

With some focus on innovative approaches:

"innovative forms of agriculture"
"how we strengthen production, delivery, and supply"
"a solution to meet the problems"

Interviewees later fleshed out these definitions further so that some who didn't mention sustainability or innovation here did go on to talk about them later. But this summary offers a useful barometer of which aspects of the concept as it now stands are "front of mind" for people when asked for an initial description.

Three of these four threads closely reflect the four aspects of MetroAg that the teams have been working on to date:

1. Using metropolitan characteristics as design elements for innovation (innovation)

2. Responding to the diverse needs of metropolitan consumers (meeting the needs of the city)

3. Linking people-planet-profit values in new business (focus on sustainability)

4. Making new combinations as the basis of new value propositions (innovation)

The fourth common element in the shorthand definitions is the idea of activities happening in some close proximity to the city. Interviewees were clear that MetroAg is not bounded by city limits and rather is more defined by close connection to the city, being part of the larger system that moves beyond a fixed geographical space. In some contexts, this fluidity is more challenging than in others. For example, the city of São Paulo, with a population of approximately 20 million, is the size of some countries. Interviewees from Brazil mentioned that from a scope point of view, the tendency to focus on the city itself may be justified. They also raised a particular local challenge that the use of the word "metropolitan" initially created confusion in the Brazilian context because of the identification of the word with legislative boundaries.

TransForum says that, unlike UrbanAg, Metropolitan Agriculture takes place in a much broader region than the physical boundaries of the city and offers more of a way to characterize the environment (highly urbanised, land mostly cultivated, lot of consumers, competition for space, competition for resources). For agriculture to be economically viable in such an environment (where land prices are high because of the

scarcity of land and where resources are expensive), it has to be innovative (creating new value propositions), efficient (in terms of resources), and effective (in terms of meeting consumers/citizens needs).

There is a need to look carefully at a potential tension between thinking about the "metropolitan environment" as being defined as the space which includes the locations of activities up and down the supply chain from a production node which is how it is defined when looking from a systems view (this might be a very wide area in some countries) versus defining the metropolitan environment based on the criteria: "highly urbanised, land mostly cultivated, lot of consumers, competition for space, competition for resources." (which might be a much narrower space) These two approaches to defining a metropolitan environment may overlap but are not necessarily identical in some contexts (for example, in cases in which land is available around the edge of the city). This is one area where further engagement would be beneficial.

The data provided by these interviews does suggest, however, that the core of a shared concept of Metropolitan Agriculture is developing around the four elements of spatial connection with the city/urbanised environment; an intention to meet the diverse needs of the city; an emphasis on people, planet, and profit; and a focus on innovation using characteristics of the metropolitan environment and new combinations of activities.

Deeper Perspectives

What is it NOT?

Some people emphasized where they thought the boundaries of the concept ended. Much of this discussion seemed to have emerged from differences of opinion about how the four elements above, with different emphasis, were being adapted to local interests.

The whole question of how a city feeds itself	"It doesn't involve things like commodities and imports"
	"We're not dealing with the global food system"
Consumption without the connection to production	"We can't call something Metropolitan Agriculture and only look at the consumption side."
Only production focused	"If we focus too narrowly on production, we lose sight of the impact on society and aspects of the food system that are really important—we need to look upstream and downstream … to make use of the contextual opportunities of the metro area for job creation and for consumers to understand where food comes from and the impact of how it's produced."
	"If we just think about production, we are not preparing ourselves for a different scenario going forward."
About a specific, rigidly bounded geography	"It took quite a while for me to disconnect the concept from this geographical approach."

In addition to the four elements mentioned above, two further, perhaps higher-level aspects of MetroAg came out of some of the interviews. The first was the purpose of reconnecting agriculture and the city, and the second was the approach of connecting theory and action.

Reconnect agriculture and metropolitan areas	"[It's about] creating new connections between metropolitan areas and agriculture."
	"We concluded that agriculture could contribute to metropolitan development—you open up a whole range of possibilities."

	"I don't want to say this is about food; it's about metropolitan development going forward: health … using food and food production … associating people back into a connection to the land again who've been away from the land for generations. If not, then we'll continue to have battles about greening and food."

Connect theory and practice	"It relates university and a more theoretical perspective with more practical and active groups: farmers, agribusiness, and government."
	"Creating a practical innovation and university knowledge-driven network of sharing—each successful in enhancing local food production."
	"I hope we can generate … a university network … that starts to … share resources … to provide support to and respond to the needs of innovative entrepreneurs in cities."

There are some significant differences of opinion among key stakeholders about the degree to which to be effective and different from other initiatives, MetroAg needs to be locally/regionally focused and quite clearly defined as not being about global food/agriculture issues. Others hold a view that considers it vital to link it into global processes and to see it as having an impact on and being impacted by them, which is a less "boundaried" interpretation. This requires more engagement going forward.

It will be worth testing the assertions of what MetroAg is not among the group driving the process forward, as there may be divergence in these views. But again, the two higher-level intentions to reconnect agriculture and the city and to do so by actively connecting theory and practice (through activities and social organisation) did not seem contentious.

Boundary Issues

MetroAg and UrbanAg

A key concern and question for MetroAg is how well it is differentiated from Urban Agriculture. Many of the stakeholders participating in city workshops and attending the Summit are UrbanAg practitioners, so this distinction is important if MetroAg is not to become confused with the former.

The concern is valid, as three interviewees noted:

"The Summit made it clear for me that Metropolitan Agriculture is an economic activity, carried out by professionals, that also delivers on people and planet values. Urban Agriculture is often not about agriculture as an economic activity, but primarily about producing food, in combination with social values like community building. ….If there is no strong economic incentive, UrbanAg projects will remain heavily dependent on grants and subsidies and will not lead to real economic empowerment of urban farmers. For me, that makes Metropolitan Agriculture a real complement next to UrbanAg."

"In the first meeting … I understood that MetroAg would be very similar to UrbanAg—and it was even said that it was not—but I couldn't understand what the difference was and I thought it was just a new concept."

"In the beginning I thought it was a newfangled way of talking about UrbanAg. The concept was nebulous, and I thought it was a way for this organisation to lay claim to something new: a marketing jingle. … Now I see a clear distinction."

How it differs from UrbanAg	
Amsterdam	"It takes your thinking away from your rooftop and to your region."
Detroit	"It moves beyond growing food on vacant land to strengthening relationships with farmers that already exist but who aren't remote from urban settings."
Johannesburg	"UrbanAg has been primarily looking at food security and social capital but very little at those other multifunctional aspects … MetroAg is looking at much more sophisticated, intensive, technologically advanced, and economic approaches that are more responsive to broader needs in the urban context."
São Paulo	"It took me quite a while to disconnect the concept from a geographical approach … and [to see] a more general view of agriculture related to landscape and nature itself. … From the beginning, I understood the importance of the participatory methodology. For me, the difference between UrbanAg and MetroAg was the introduction of these methods … The local environment of agriculture in Rotterdam introduced different perspectives; mainly, the issue is related to innovation and technology."
(with potential consequences for who is included in the process)	"We need to include a broader and more traditional perspective, e.g. hyper and supermarkets … and also bring an institution that works with social certification."

All of these interviewees considered themselves as coming from an Urban Agriculture context. It is interesting to note that, for each of them, the shift to MetroAg involved changes in different aspects of the idea:

A geographical shift to a broader conception beyond growing food in the city (in two cases)
A shift to innovation and technology (in two cases)
A shift to focusing on food production as an economic activity
A shift to seeing agriculture as something more than merely food production and consumption (toward "multifunctional" agriculture) (in two cases)
A shift to focusing on a broader group of end consumers (one case) and a broader group of stakeholders (one case)

These findings suggest that there is an initial explanation of how and why MetroAg is different from UrbanAg, but that it should be strengthened. The experience at the Summit seems to have been key for people in seeing the distinction clearly, whereas previous discussion and explanation of the differences had not achieved this aim. This area would therefore benefit from a close focus in discussion going forward, building on the elements of a distinction shared above.

Hi-Tech approaches

The experience of the Summit did convince some of the interviewees of the need for other practices, in addition to organic farming and permaculture approaches, to enable sustainable production at a scale more able to respond to cities' needs. The examples that people saw in the Netherlands raised possibilities, but they also surfaced questions and concerns.

There is curiosity about the potential of hi-tech closed-loop systems.	"I'm interested in the agroparks, but I must say it raises my hackles, because it's so technological and controlled and far from the permaculture approach that I am involved in and drawn toward. But the idea of intensive, closed, to some extent self managed, almost living systems is interesting"
	"It will cause us to think about closed energy systems with no energy or water loss. … MetroAg could be the vehicle to share these new innovations and creativity and could cause us to have a whole new industry that's yet to be invented."
But there are questions and concerns, too	"I went to visit the PlantLab … I would have some difficulty in accepting that concept; it seemed there are boundaries to define there."
	"I went to see the greenhouse … they were trying to close the loop in terms of sustainability with recycled CO2 … but what I saw was industrial agriculture trying to be more sustainable: they hadn't closed the loop, there was lots of leakage…"
	"I was surprised to see that some participants automatically label corporate agribusiness as evil. But big companies can have huge impacts if they do the right things. We should definitely not only focus on small-scale local production. The question is how to scale up the learnings."

From this feedback, it seems participants are challenging TransForum—with its experience with the more industrial side of MetroAg—to provide evidence of its successes and failures that is widely accessible to an international audience and is grounded in data. As one interviewee asked, What track record do these initiatives have? If they are successful, get the message out there. If not, ask why?

Divergence

The Dutch description of MetroAg underlines the degree to which concerns about animal welfare and production methods are key drivers of this approach, agriculture earning its license to operate in that context. On the other hand, the interviewee from Chennai said:

"I think the metro consumer in Chennai is not bothered about how the food is produced but more bothered about safety and wants it to be convenient and accessible."

The high-level imperative to meet diverse consumer needs and to honour contextual differences may be sufficient to hold both these realities in one overarching approach, but it begs the question about the relative importance of each of the 3Ps (people-planet-profit) in different economic and social contexts.

The relative emphasis on technological innovation

Comments suggesting the need to address this area been included in the previous sections on contextual adaptability and the role of hi-tech approaches. Some interviewees from different cities either questioned whether hi-tech approaches were genuinely relevant to their type of projects or were asking for more evidence of its effectiveness in general. In the former case, MetroAg proponents may need to be clearer about encouraging openness to technology that meets local needs, rather than seeming to promote a

particular model of technologic innovation. One way to do so is to provide detailed evidence of outcomes on all the 3Ps from existing projects.

While interviewees who attended the Summit coming from an "alternative" background have shown some willingness to explore the possibilities of closed-loop production, for example, many others from a similar background coming new to the concept will not be so open. MetroAg proponents need to acknowledge that this conflict exists and indicate that the project is intended to address it in ways that challenge everyone involved. MetroAg can't assume that all these boundaries will break down merely via discussion.

The balance between production and consumption

Some of the interviews showed a marked difference between people who had a stronger focus on meeting the consumer's needs and others who were more focused on helping farmers value what they do. While the MetroAg concept as it now stands allows for both of these approaches, MetroAg projects clearly need to demonstrate how they connect up the different parts of the system.

Summary and Suggestions

After the Summit, participants experienced a significant degree of alignment around the MetroAg concept. The eight interviewees largely share an understanding of its principles: reconnecting agriculture and the city by connecting theory and practice, with four core elements of activities, meeting the diverse needs of the city, following 3P principles, and seeking innovative approaches. In addition, many in the group are using MetroAg as a way to think differently about agriculture and the city, leading to novel combinations of activities, and as a new way of working together, both to come up with the ideas and to implement them.

However, some important areas require attention going forward. The following is required in terms of developing a robust definition:

- Clarity on how to define a metropolitan environment
- The need to target the triple bottom line so that economic profitability goes hand in hand with environmental gains and social and public appreciation
- The need to talk about the use of technology to balance the desire for the totally new and untried with what is appropriate in less technologically advanced situations
- A clearer definition of what distinguishes Metropolitan Agriculture from Urban Agriculture

Other issues that have arisen include:

- The need for more sharing of detailed evidence from successful projects
- The need for a clear acknowledgement that the concept is operational in a contested arena and that while as a concept it aims to transcend these differences, when working with people, these conflicts will be addressed in ways that challenge all concerned (to support people to transcend old barriers)
- The need to recognize that working with certain principles, e.g. meeting consumer needs and simultaneously focusing on the 3Ps, may require deep engagement and discussion with stakeholders particularly in cities where there is not consumer demand for triple bottom line focus, to apply the concept in a way that honours both principles appropriately.

Appendix of Existing Definitions

From "Metropolitan Agriculture: A Sustainable Perspective for Agriculture in Metropolitan Areas" TransForum

Metropolitan agriculture potentially covers many different kinds of agricultural activity and ways in which the agroproduction chain can be organised (ranging from agroparks to care farming). In all cases, the activities must take place in a metropolitan environment, are explicitly concerned with the divergent needs of the urban population and make use of the urban characteristics of that environment. The diversity of consumers also offers a diversity of new products and product/market combinations. In this way metropolitan agriculture results in a varied palette of sustainable agricultural activities ranging from large to

small and from high-tech to high touch. And all based on Triple P business models, so that economic profitability goes hand in hand with environmental gains and social and public appreciation.

Input from Sander Mager, TransForum

Metropolitan Agriculture is a way of looking at new connections between agriculture and cities that contribute to sustainable development (of both the city and agriculture).

Metropolitan agriculture takes place IN a metropolitan environment, is AIMED at the diverse needs of that metropolitan environment and MAKES USE of the characteristics of that metropolitan environment.

An important issue is the boundaries of the metroag system. Metropolitan agriculture takes place in a metropolitan environment, that is much broader than the physical boundaries of the city (limits in urban ag), and more a way to characterize the environment (highly urbanised, land mostly cultivated, lot of consumers, competition for space, competition for resources). For agriculture to be economically viable in such an environment (where land prices are high because of the scarcity of land, where resources are expensive) it has to be innovative (creating new value propositions), efficient (in terms of resources) and effective (in terms of meeting consumers/citizens needs)

1. Using Metropolitan characteristics as design elements for innovations (so the question could be: can we know and better define what characteristics stimulate innovation?)

2. Responding to the diverse needs (since values and needs differ, solutions in MetroAg show rich diversity —from high tech to high touch, from large scale to small scale, from mainstream to niche)

3. Linking people-planet-profit values in new business (requires a multidimensional focus: there is no dominance of one of the dimensions, is always both social, ecological and economical—it is really about linking societal and environmental challenges to business opportunities)

4. Making new combinations is the basis of new value propositions:

- between different sectors—agriculture and care, agriculture and recreation, agriculture and energy, agriculture and housing
- between partners in the value chain (more direct user-producer interaction, new partnerships between retail and producers, between producers and processers)
- between agricultural entrepreneurs and stakeholders in their network (NGOs, governments, social groups, knowledge institutions)

From "Rethinking the Urban Food System: Towards a Vision of Metropolitan Agriculture"
Jeff Stottlemyer, Reos Partners

Metabolism Idea

The clear space that a more urban metabolism opens up for analysis of the social and economic components of a city's fabric, and their relation to the ecologic, makes it especially relevant for understanding the complex role agriculture plays in the city. In addition, the conceptual breakdown of the barrier between city and nature widens the spatial lens of inquiry on "urban" systems to include contextually relevant activities and processes that may stretch far beyond a city's border.

Definition of the MA Framework

Practitioners, researchers and entrepreneurs need to combine the progressive elements of urban agriculture in terms of environmental sustainability and community development with activities that seek to make a tangible impact on the way that cities eat and regional economies function, thus addressing the anomalies within urban agriculture as well as challenging the more destructive elements of the current paradigm of industrial agriculture.

If the forms of metropolitan agriculture noted above merge with a systems level conceptualization of urban metabolism, an operational framework for designing agricultural initiatives can emerge. This framework focuses on economic viability and environmental stewardship, while also driving larger processes of community and regional development. Lapping writes that "compared with their nonmetropolitan counterparts, metropolitan farms tend to specialize more in high-value commodities and sell more commodities directly to consumers … Likewise, they tend to be smaller farm units and are more intensive in their use of resources. They are, in sum, more intimately connected with their markets and highly flexible in responding rapidly to changes in the marketplace."

WHAT'S NEXT?

The idea of this Summit and the process towards it originated from TransForum's International Advisory Board (IAB). After the Summit the members of the IAB, unanimously express their high appreciation for the 1st Global Summit on Metropolitan Agriculture that was organized by TransForum and Reos. Rudy Rabbinge, chairman of the International Advisory Board:

"This Summit is more than just an interesting event, it is the proof that the vision of metropolitan agriculture has high potential, also in an international context, for bringing together different stakeholders around the challenge of reconnecting agriculture and metropolitan areas to contribute to sustainable development. Next to the vision of metropolitan agriculture, the multi-stakeholder action-learning approach followed by TransForum and Reos in the process towards the summit and the design of the meeting also contributes to the unique dynamics and characteristics of this unfolding international network around metropolitan agriculture."

The IAB is impressed by the diversity of stakeholders, the positive and constructive energy in the meetings, and the commitment of participants to continue working on this topic. The Summit demonstrates that this international network is real, active and committed to continue working on the vision of metropolitan agriculture along the process approach promoted by TransForum. There is tangible support and commitment for establishing the over-arching international network, called the MetroAg Innoversity. The IAB is also aware that there are still very many ideas on metropolitan agriculture depending on context and background but is convinced that a broader global dialogue will lead to more unifying concepts.

At the end of the Summit five activities have been identified by the participants in which they expressed their commitment to continue working on. These initiatives are:

I. Establishment of an international exchange platform for business cases on metropolitan agriculture (lead by Antoine Miltenburg - Netherlands)

II. Formulation of a grant proposal for supporting the establishment and the first 2 years of the Innoversity, as an international umbrella organization for metropolitan agriculture (lead by Graeme Wilkinson – South Africa)

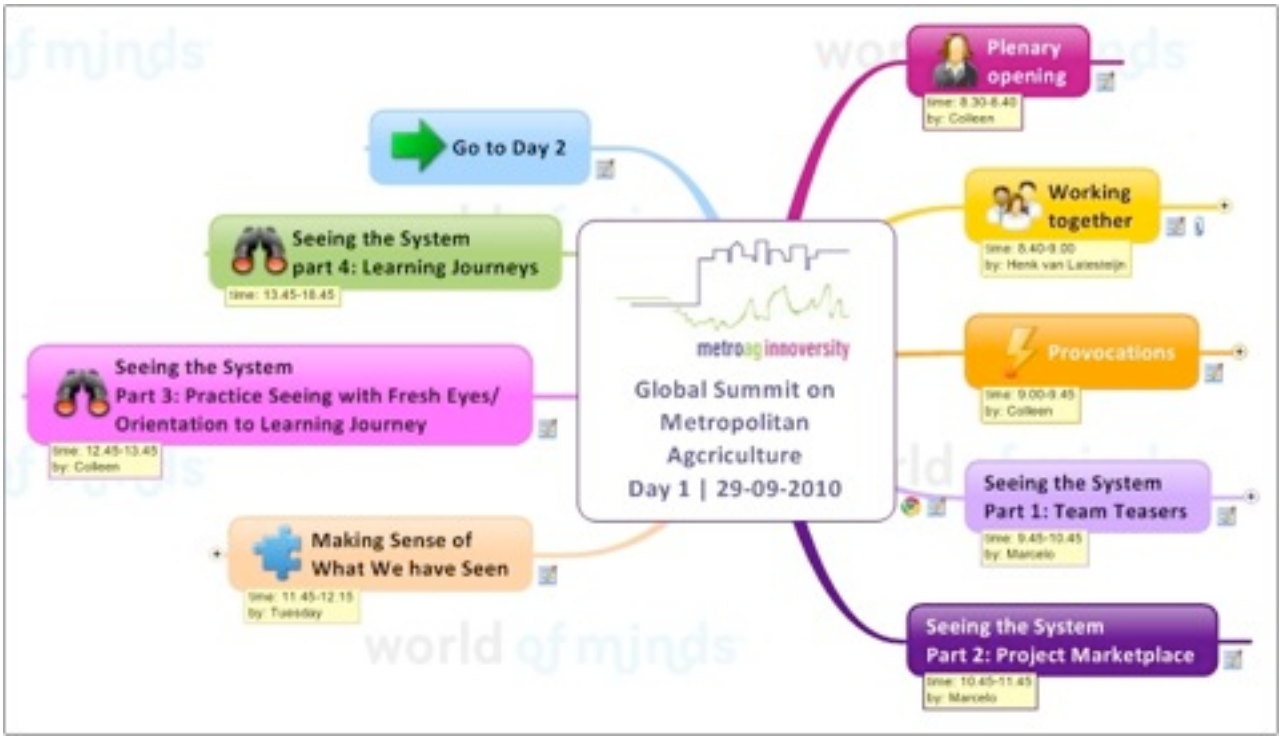
III. Formulation of a policy strategy document for an investment fund on metropolitan agriculture projects (lead by Kalyan Chakravarthy – India)

IV. Establishing an international Master's program on metropolitan agriculture, in joint cooperation between VU Amsterdam, Wageningen UR, Michigan State University, University of Johannesburg and University of Sao Paulo (lead by Joske Bunders – Netherlands)

V. Organizing the 2nd Global Summit on Metropolitan Agriculture in Sao Paulo, Brazil (lead by Decio Zylbersztajn - Brazil)

All five initiatives will have a plan of action available by December 31, 2010 and are aiming for results no later than July 1, 2011. Next to these five initiatives Michigan State University (MSU) has announced that they are planning to set up an Innovation Centre on Metropolitan Agriculture in Detroit, Michigan. The outcomes of the Summit have strengthened MSU's wish to connect this Innovation Centre, via an international umbrella organization, to other MetroAg nodes in other countries. Therefore MSU has offered to work together with TransForum on building this international umbrella organization.

Resources



These are further resources which are useful to participants of the 1st Global Summit, the Metroplitan Agriculture Community and those new to the concept of Metropolitan Agriculture:

Website:
www.metroplitanagriculture.com

Ning Network:
http://metroagsummit.ning.com/

Photographs from the Summit:
http://www.flickr.com/photos/15304316@N04/sets/72157625063398865/

Mindmap of the Summit
http://www.worldofminds.com/projects/metroAG/
Maps Created by Alexis Van Dam of World of Minds (www.worldofminds.com) live at the Summit

We hope you will stay a part of the Metropolitan Agriculture network. For enquiries and further information please contact:

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