



RAIN

Regional Agro Industrial Network

DASUDA

Dutch Alliance for Sustainable Urban Development in Africa

Remco Rolvink

Co-founder / Secretary General / Master Planner

remco@dasuda.nl



Planning for the food value chain in Kenya



RVO

DAJUDA
Dutch Alliance for Sustainable Urban Development in Africa

AEBEL  **WAGENINGENUR**
For quality of life



GLOBAL POPULATION GROWTH TILL 2050



RAIN

KENYA

URBANIZATION



Ikorodu, Lagos State, Nigeria in 2006

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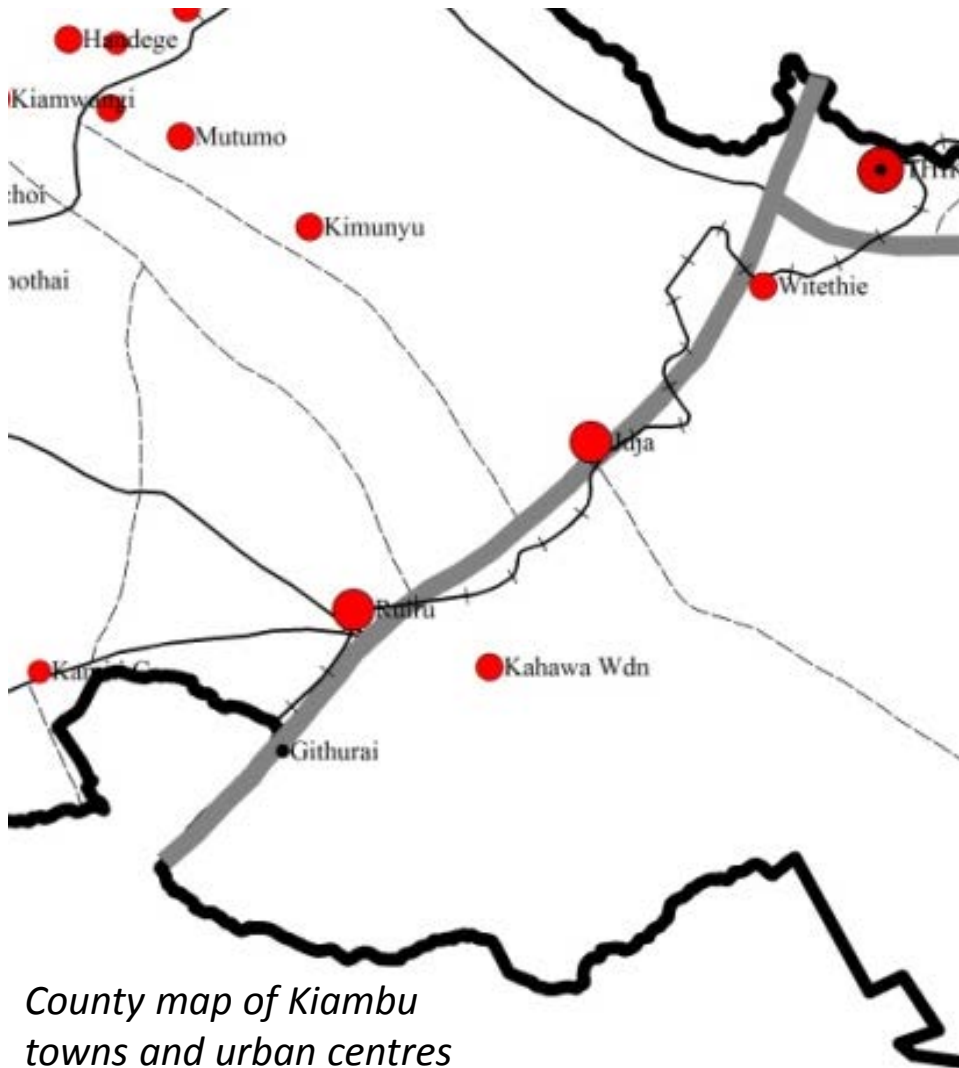
40 TO 70 PERSONS PER HOUR



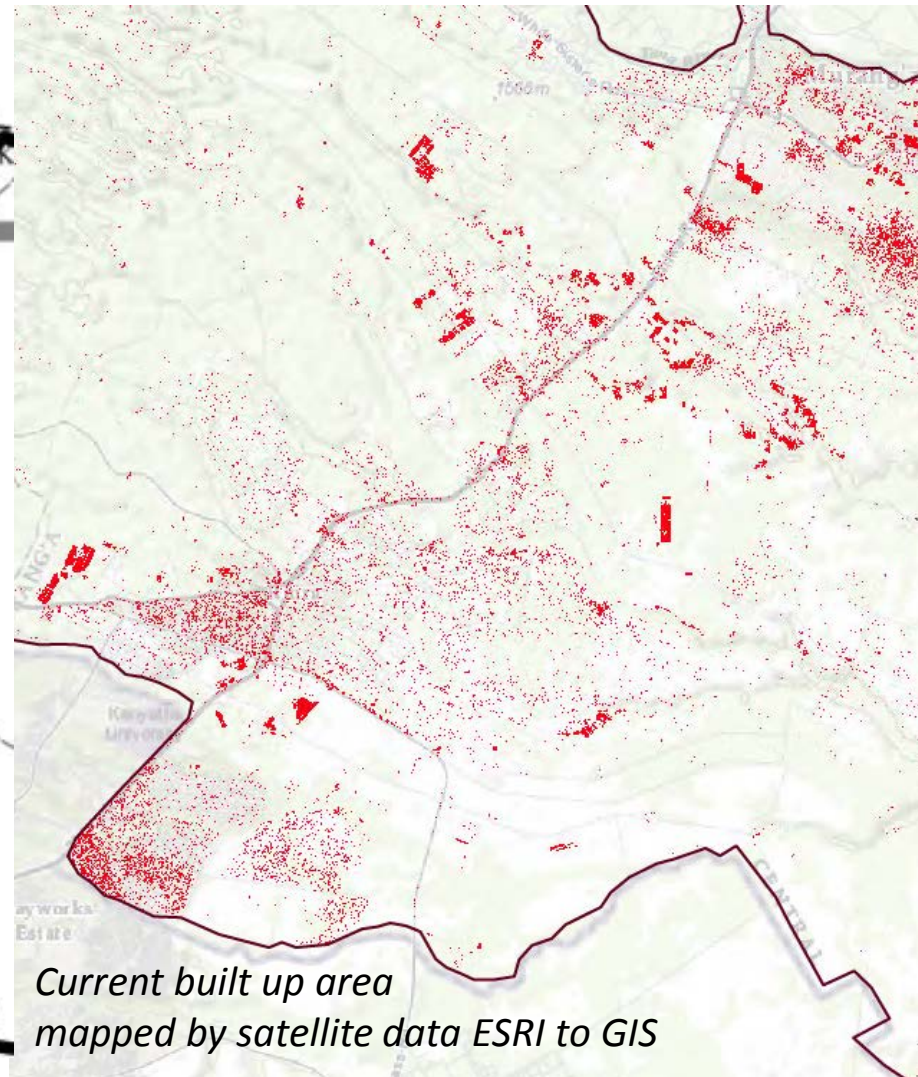
Same area 6,5 year later

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CURRENT IDEA OF CITIES & TOWNS



County map of Kiambu towns and urban centres



Current built up area mapped by satellite data ESRI to GIS

REAL URBANISATION SITUATION



Uncontrolled, informal, land consuming urbanization (Kiambu, Thika Highway)

CURRENT TENSION FOOD vs. CITY

- Expanding urban sprawl invades the agricultural domain
- Land prices are rising and becoming too expensive for farmers to expand their business.
- Larger producing farms move out of the region.
- This has repercussions:
 - *Lower availability of food,*
 - *Higher prices for food,*
 - *Challenges in quality of food*
 - *Job loss in agriculture, where we need extra jobs instead.*

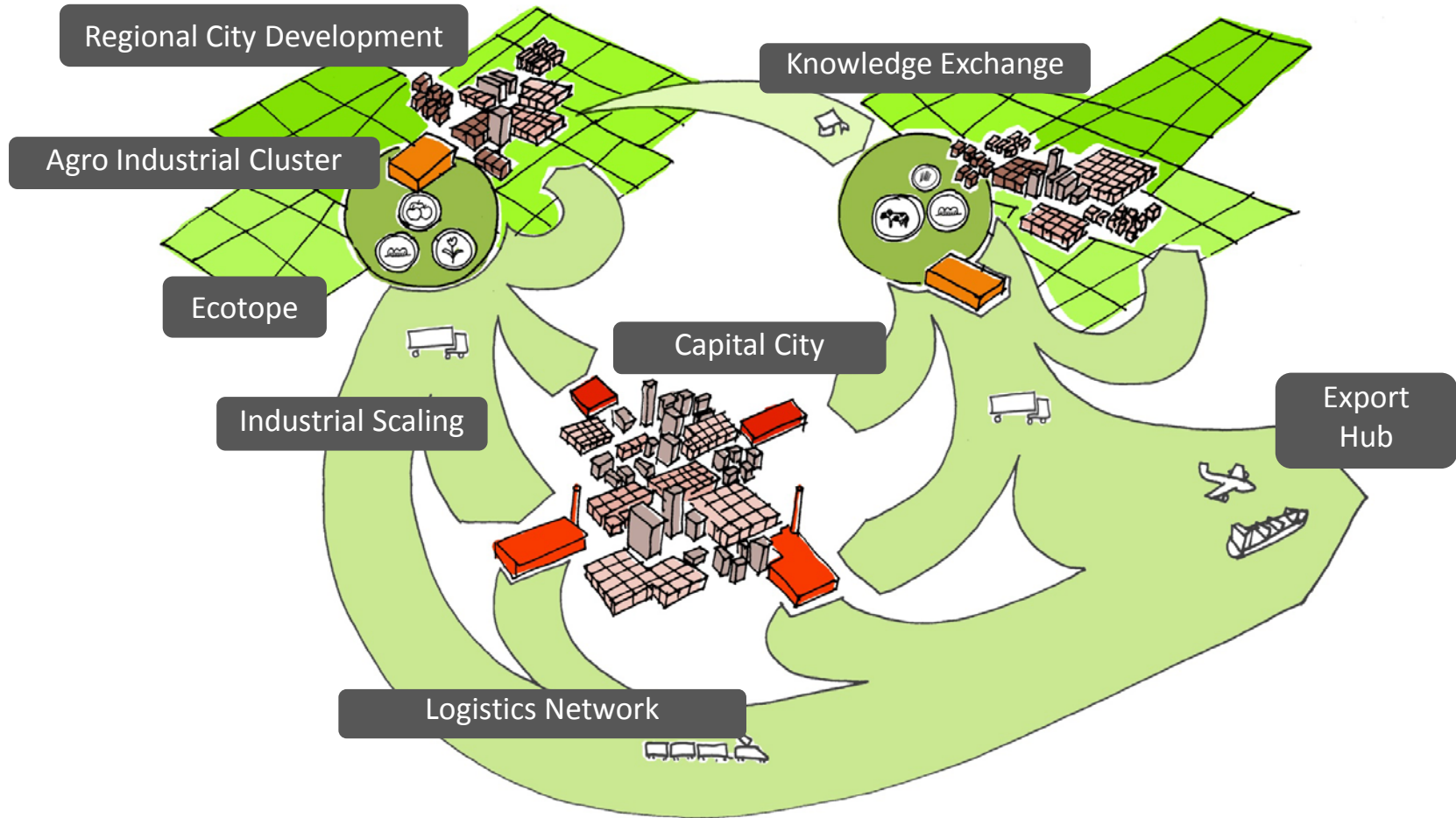


WHY RAIN

- Planning is a critical issue with these effects of rapid urbanization
- Not fully using agricultural potentials
- Lacking secured situation for sustainable investment
- Need to work with local government because:
 - cross-sectoral approach to achieve effective implementation
 - strengthened urban-rural relationship to enhance economy and liveability



RAIN CONCEPT: FOCUS ON AGROHUBS



An Intelligent Network



RAIN KENYA

APPROACH G2G

- Analysis and inventory in space and market
- Development process of spatial planning for agro industrial development

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Urban Area	
200 - 400	
400 - 600	
800 - 1200	
1600 - 2000	
2000 - 2400	
2400 +	



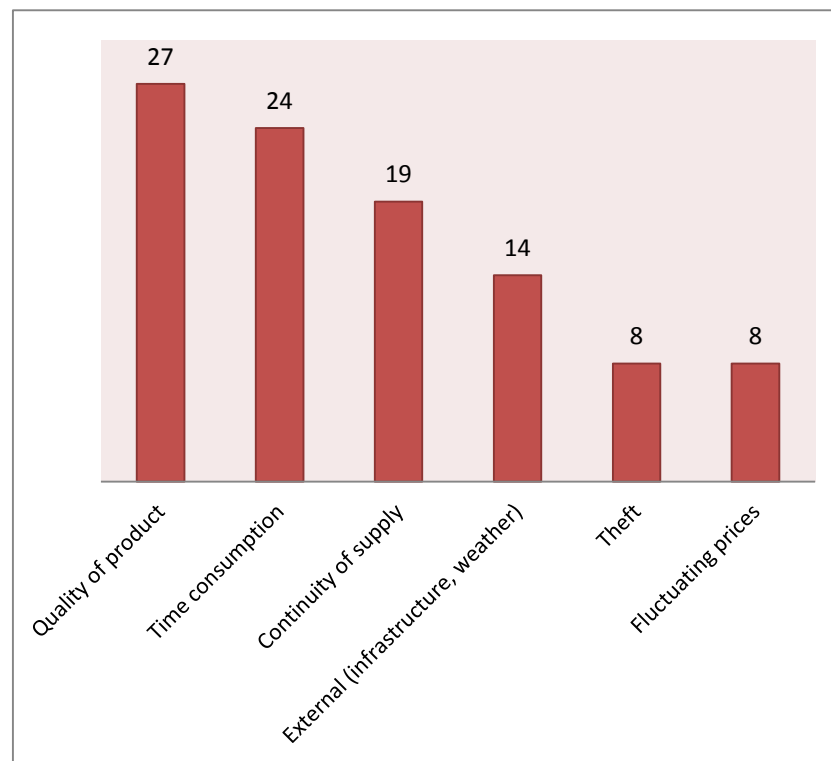
Forest

River



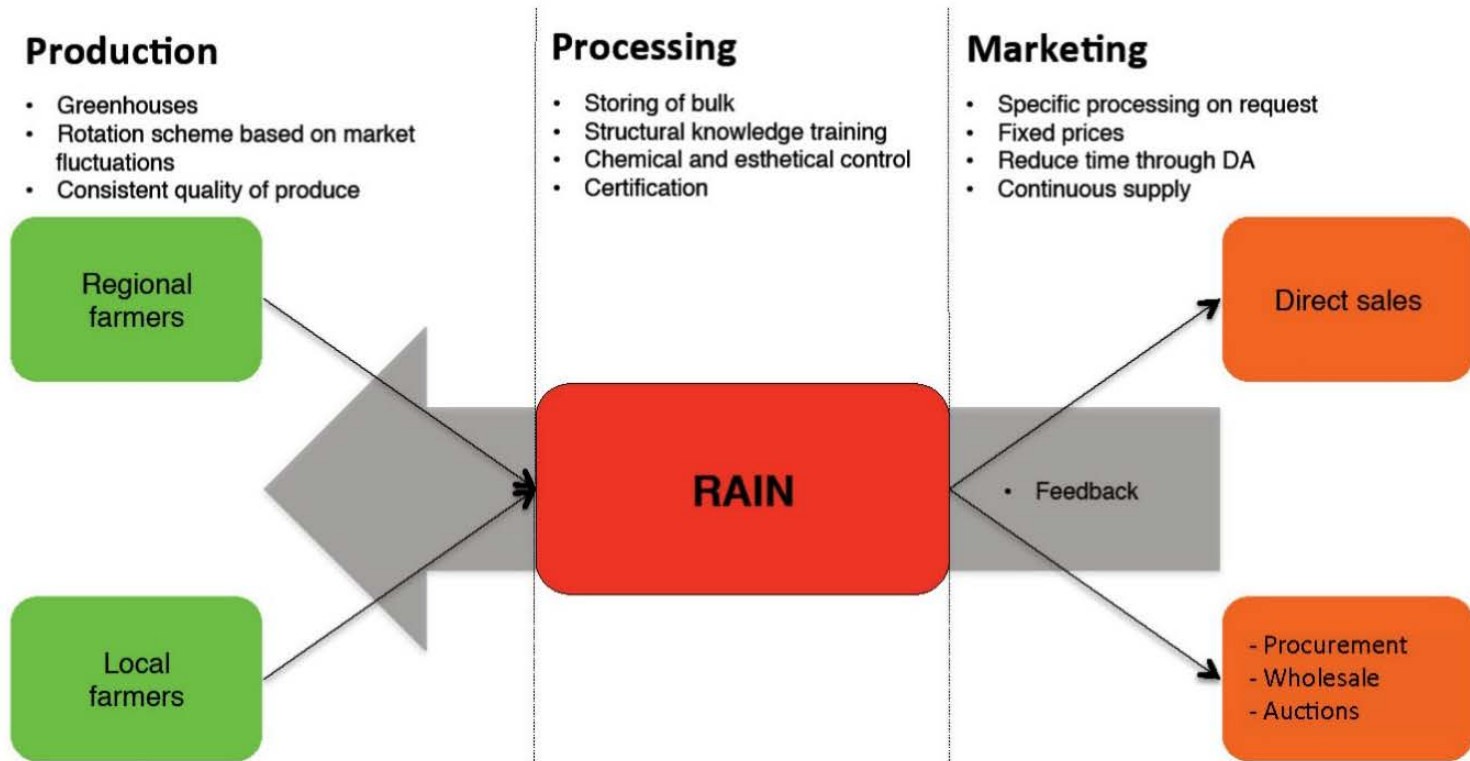
MARKET ANALYSIS; OFFTAKE PARTIES

- 1) Lack of a continuous and reliable supply of produce;
- 2) Lack of produce that is consistently high in aesthetic quality and nutrients and low in pesticides;
- 3) Time and financial investments required that are related to procurement;



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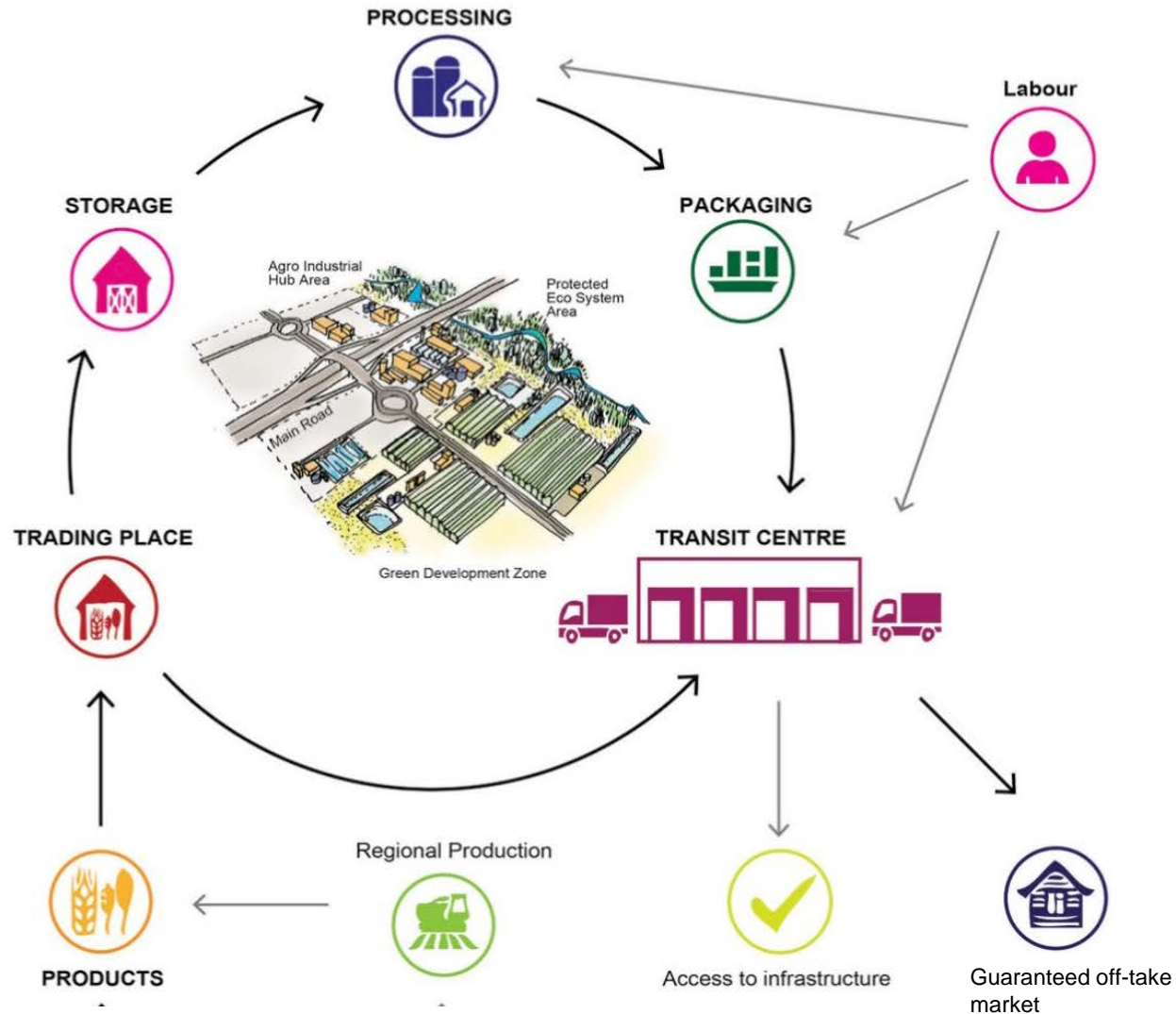
MISSING LINK IN SUPPLY CHAIN



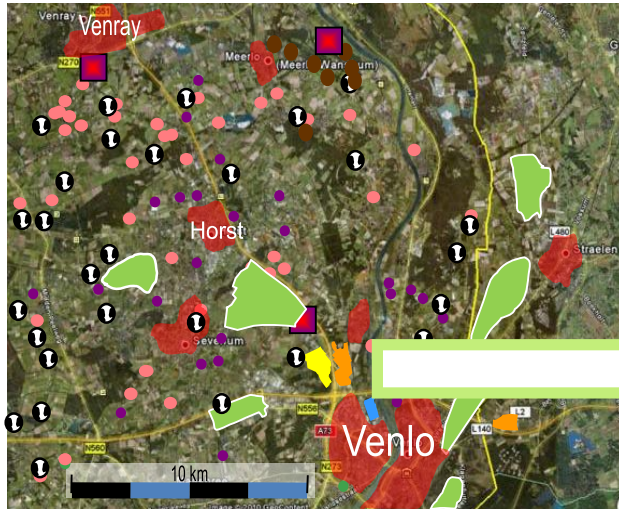
Proposed RAIN supply chain



CLUSTER OF AGRO BUSINESSES



RAIN PROJECT EXAMPLE



- Greenhouse Area
- Consolidation Centre
- (Sub)urban Area
- Isolated Greenhouses
- Large Scale Pig Farm
- Large Scale Chicken Farm
- Large scale Dairy Farm
- Floriade Horticulture Expo
- Harbour
- Industrial Ecology



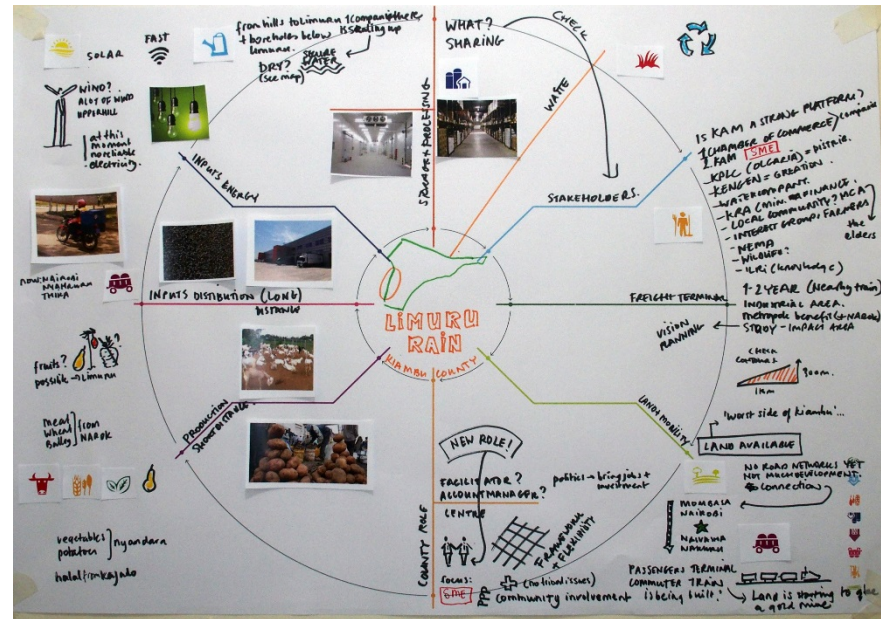
Consolidation centre Freshpark Venlo

- 130 ha
- 130 companies
- 1500 jobs / 3000 in the season
- 3th largest logistic area of Holland
- Result of 10-15 years of integrated planning and development

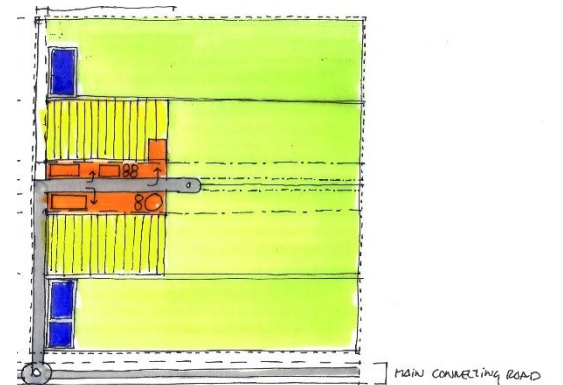
Example of an Agro/Food Network Cluster: Greenport Venlo, NL








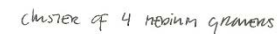
RAIN KENYA







[illegible]

- Input aspects of the business case:
 - 250 Ha production area
 - Large and medium sized farms
 - Transit hub as part of Greenport



-  OPEN FIELD PRODUCTION
-  GREENHOUSE PRODUCTION
-  UTILITY SPACE
-  IRRIGATION WATER BUFFER
-  ROAD + INFRA SPACE
- FENCE



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FACILITATING ROLE OF COUNTY

- Counter at business development centre of the county
- Planning procedure and documents
- Communicate business development with other stakeholders
- Decision procedure
- Implementation phase can start



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