

LTAS 2-day Adaptation Scenario Development Workshop

Photo documentation

St. Georg Hotel, Centurion, 12. -13. March 2014

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Workshop Outline

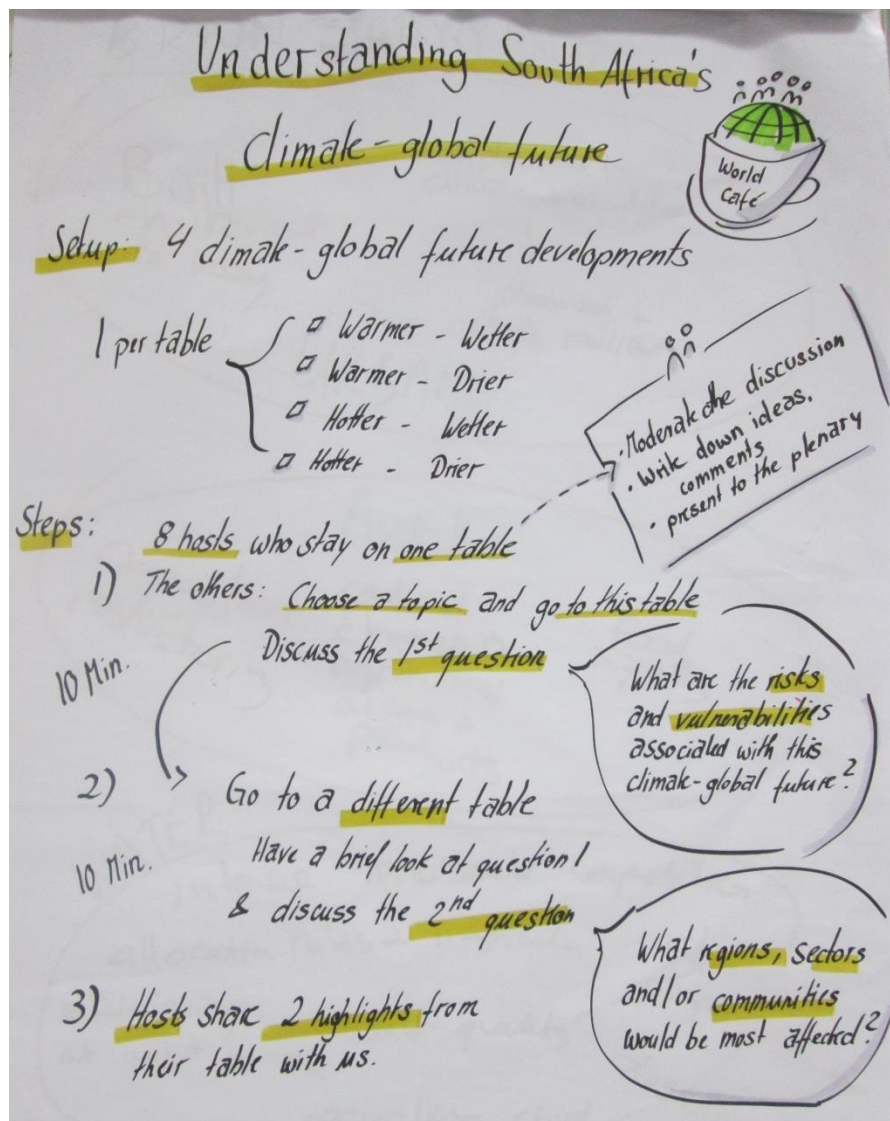
Workshop Objectives

- Establish buy-in from stakeholders on adaptation scenario planning
- Get consensus on what is an adaptation scenario vs adaptation strategies
- Identifying key parameters supporting the development of narratives to describe a range of plausible adaptation scenarios for South Africa in a regional context
- Outline the next steps and get ideas on how to involve the different spheres of government

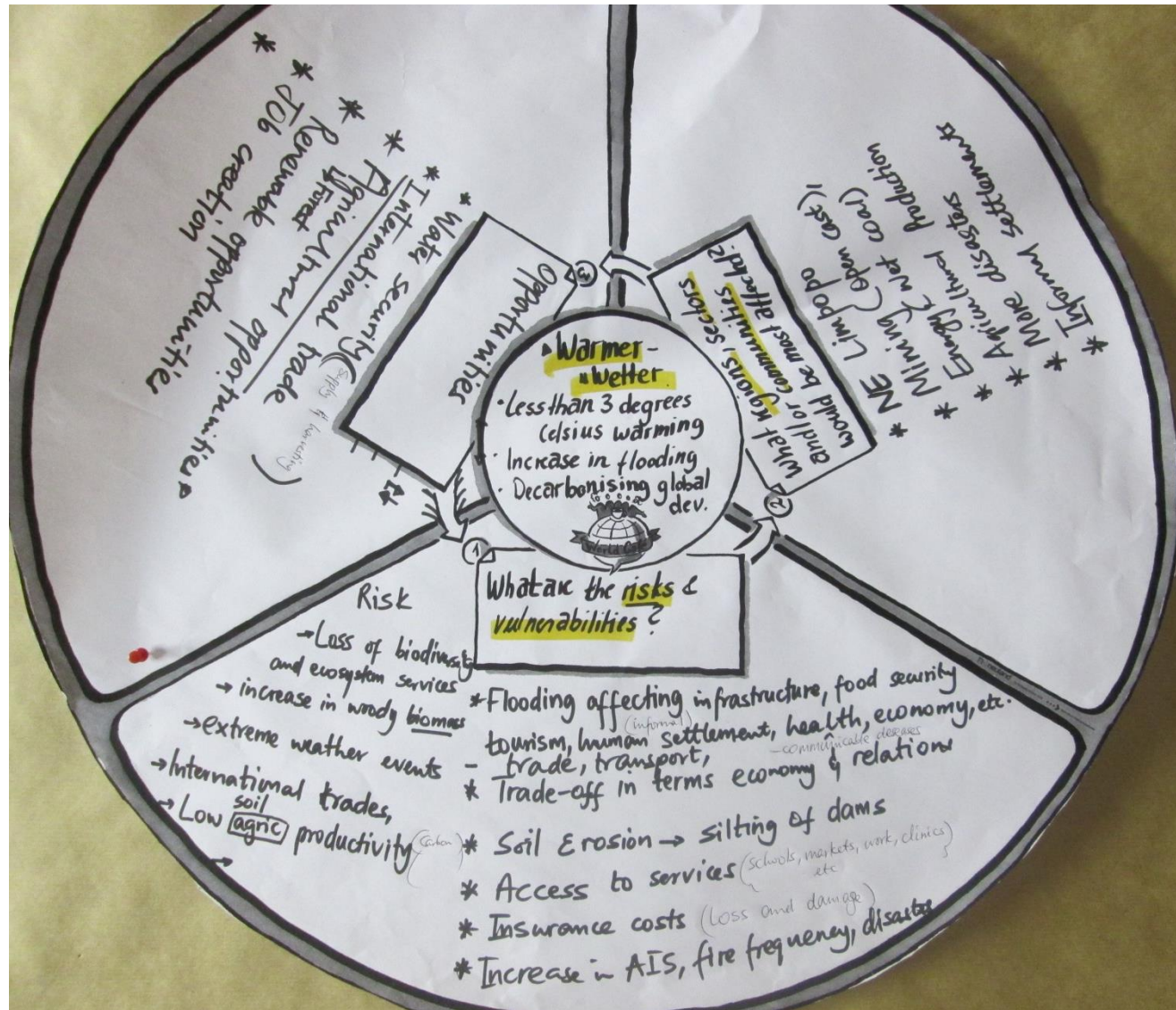
Today's Agenda

- | | | | |
|-------|---|-------|---|
| 10:00 | Welcome & Introduction | 10:30 | Development - Adaptation Scenario Methodology |
| 12:15 | Understanding South Africa's Climate - Global Futures | 11:30 | Status of Sector adaptation planning |
| 13:30 | • Input | | |
| 14:30 | • World Café | | |
| | Lunch | | |
| 14:30 | Feedback presentations | 15:30 | Development - Adaptation Responses |
| | | | • Input |
| | | | • Break-away session |
| | | | • Feedback presentations |
| 17:30 | Closing Day 1 | | |

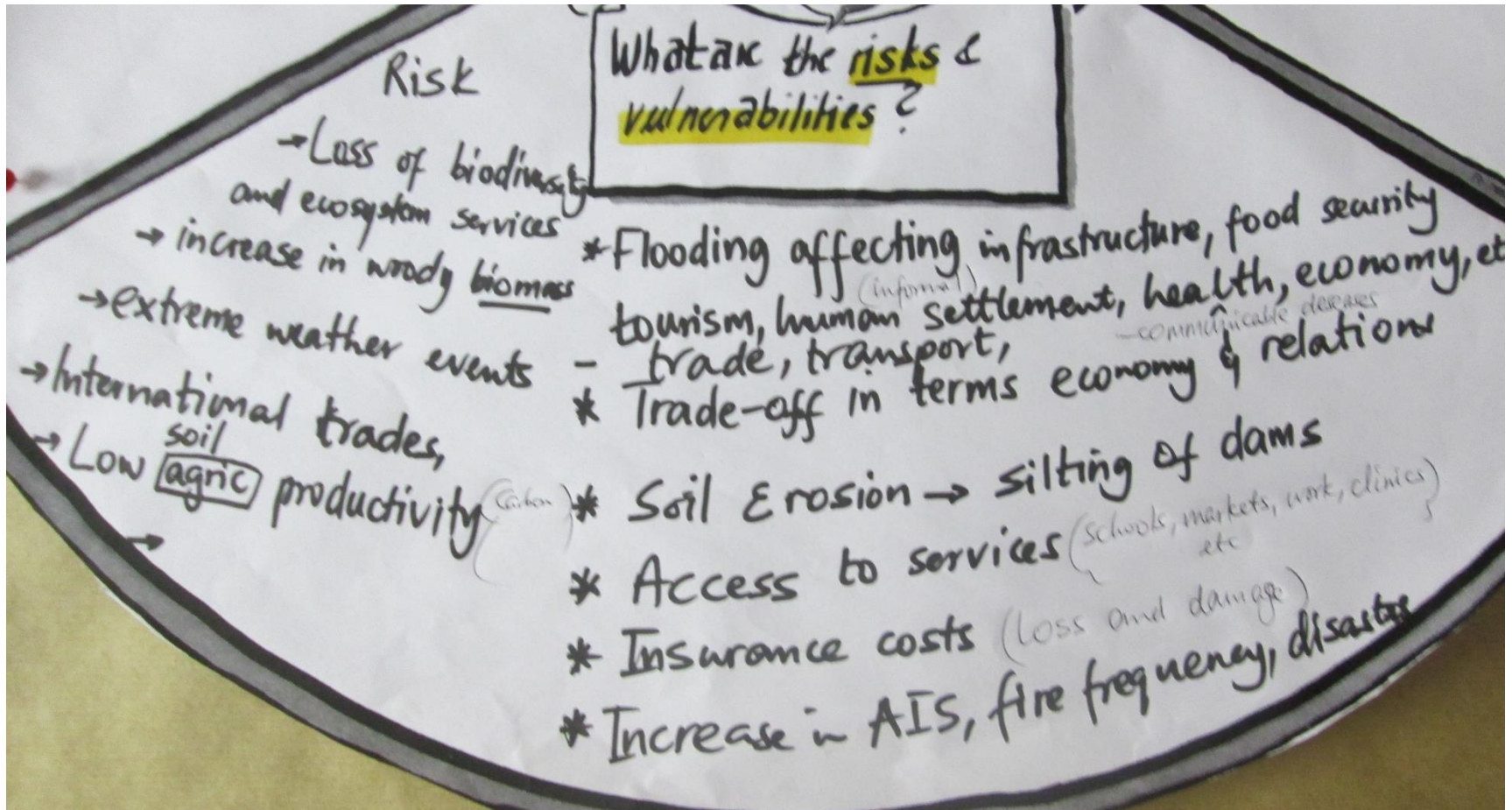
World Cafe: South Africa's climate future descriptions



Warmer – Wetter (I)



Warmer – Wetter (I)



Warmer – Wetter (I)

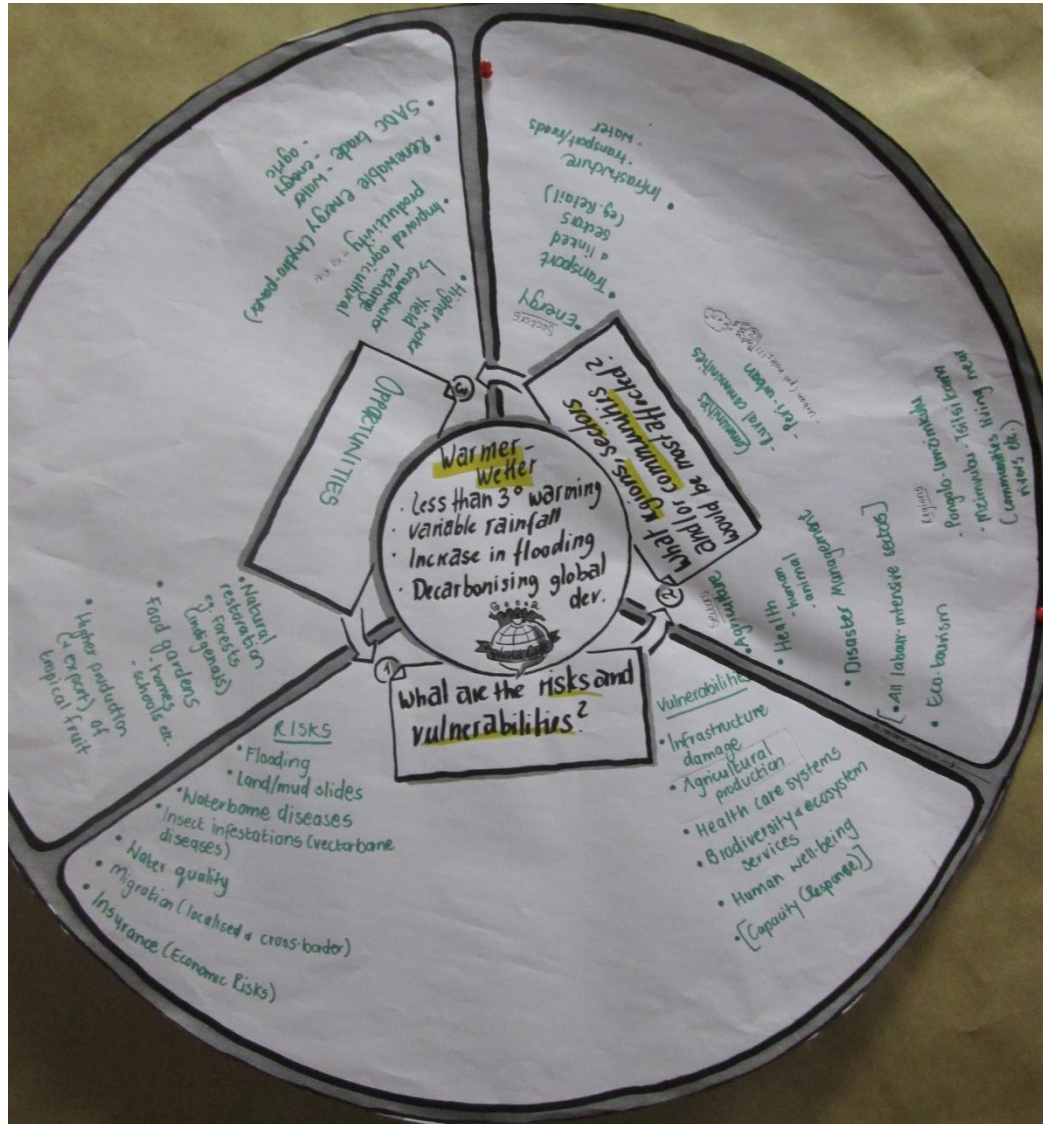
② What regions, sectors and/or communities would be most affected?

- * NE Limpopo
- * Mining (open cast),
- * Energy (wet coal)
- * Agricultural Production
- * More disasters
- * Informal settlements

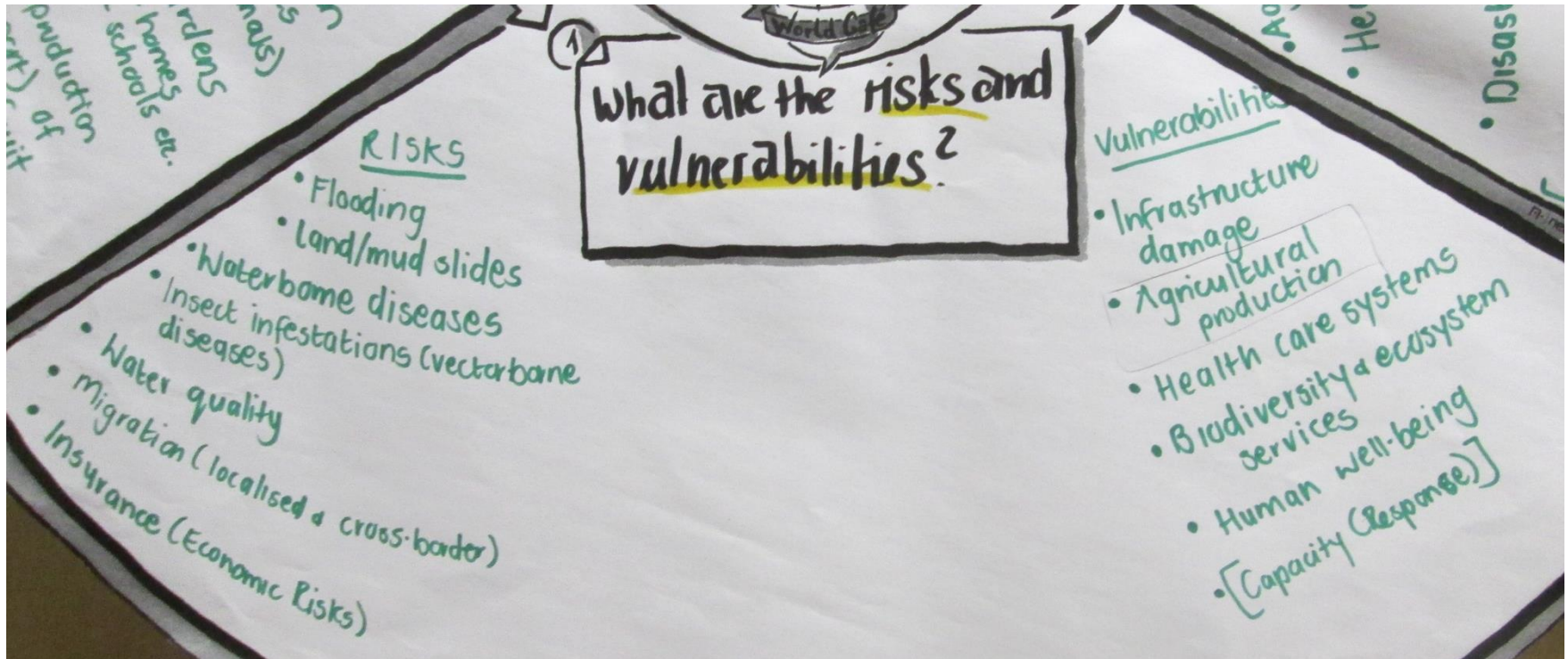
Opportunities

- * Water security (supply & harvesting)
- * International trade
- * Agricultural opportunities
 - ↳ Forest
- * Renewable opportunities
- * Job creation
- *

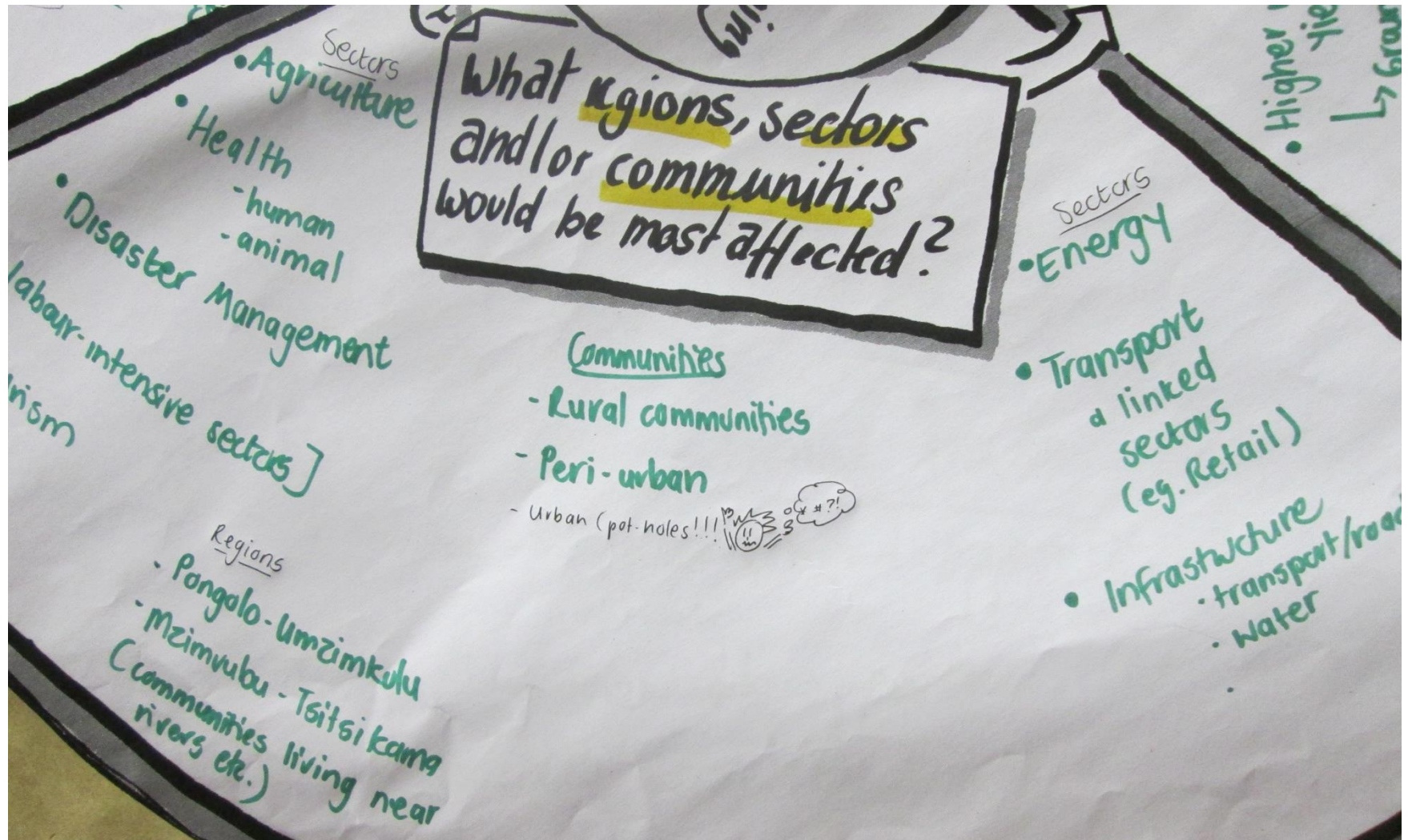
Warmer – Wetter (II)



Warmer – Wetter (II)

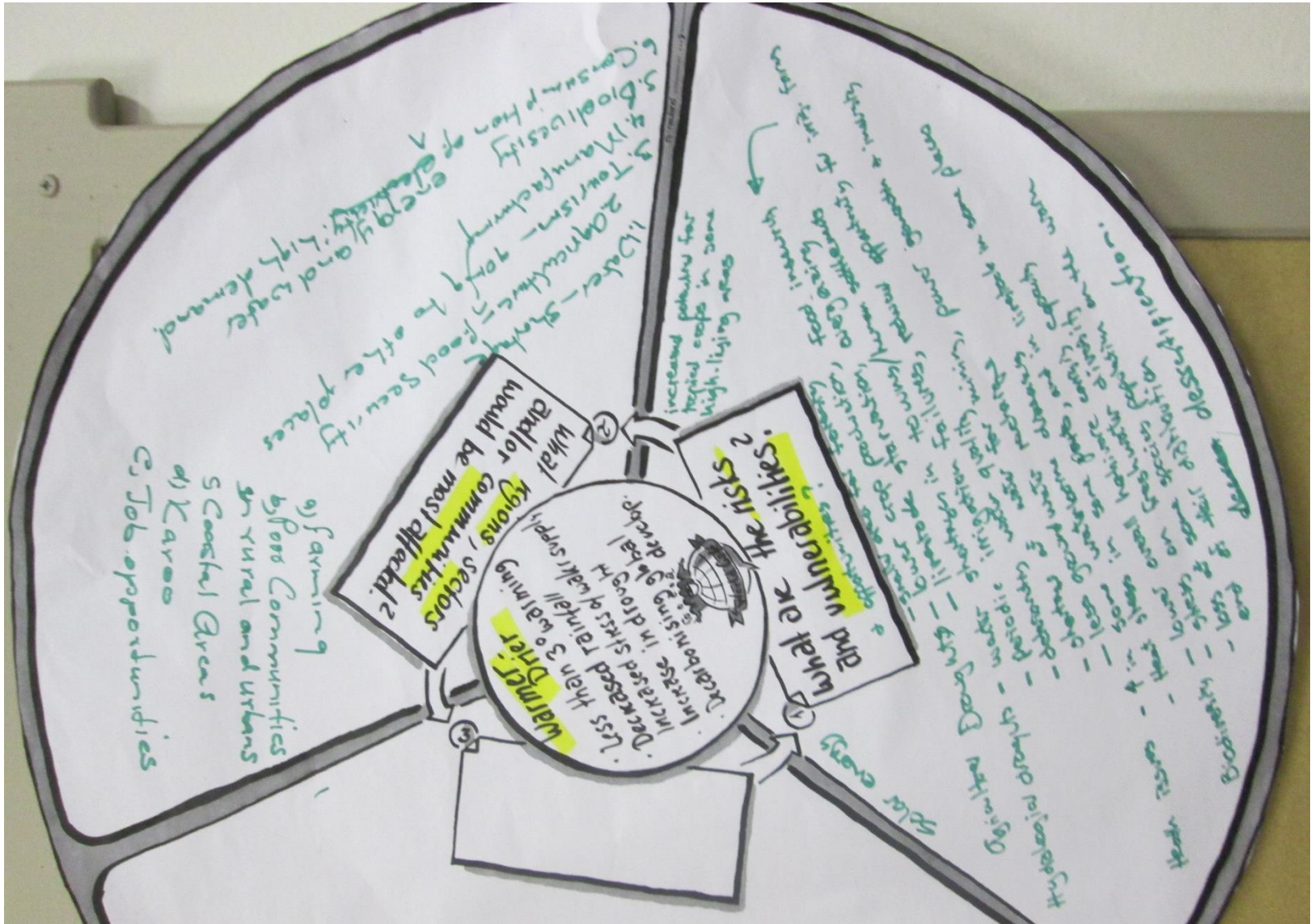


Warmer – Wetter (II)

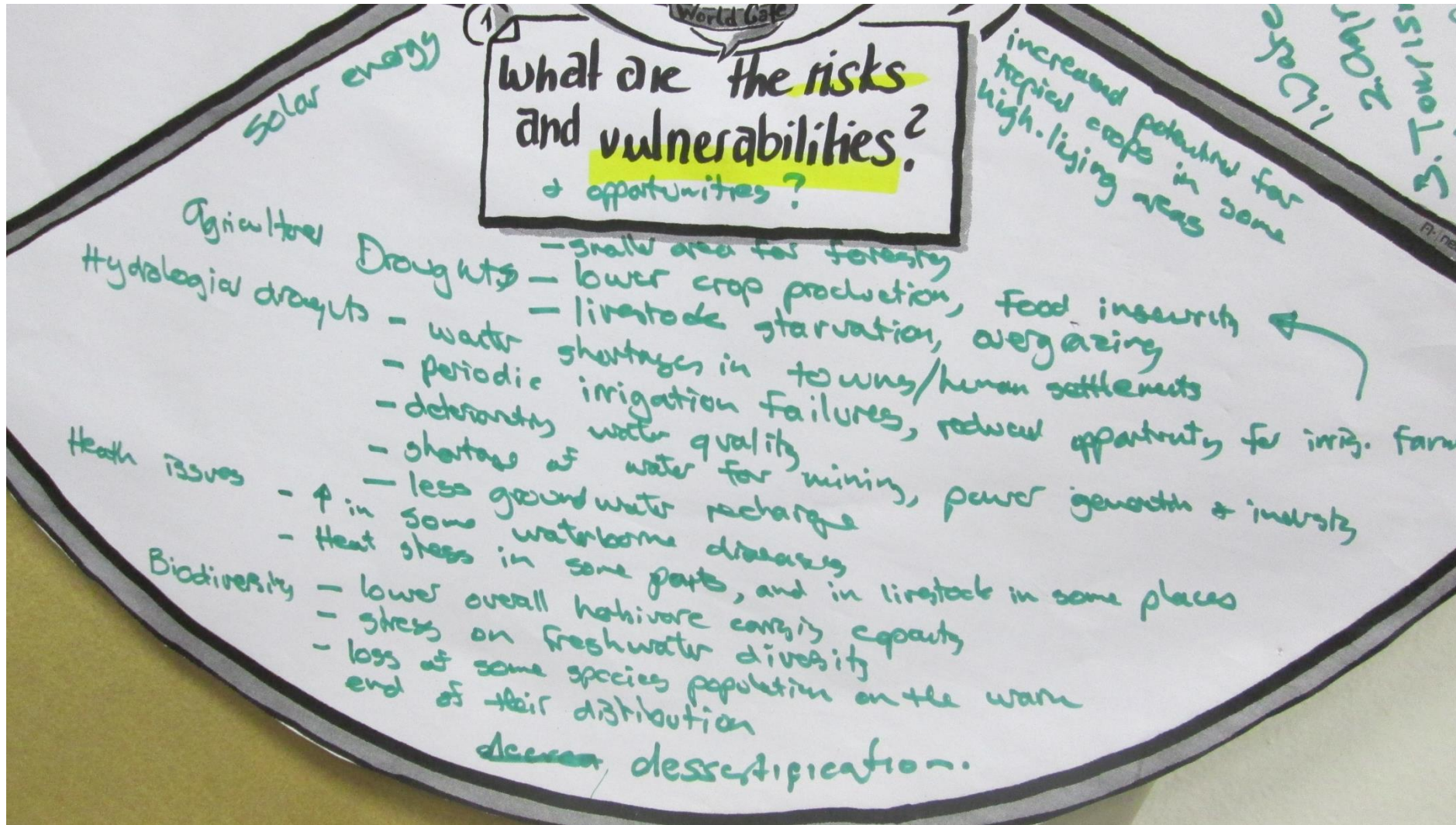


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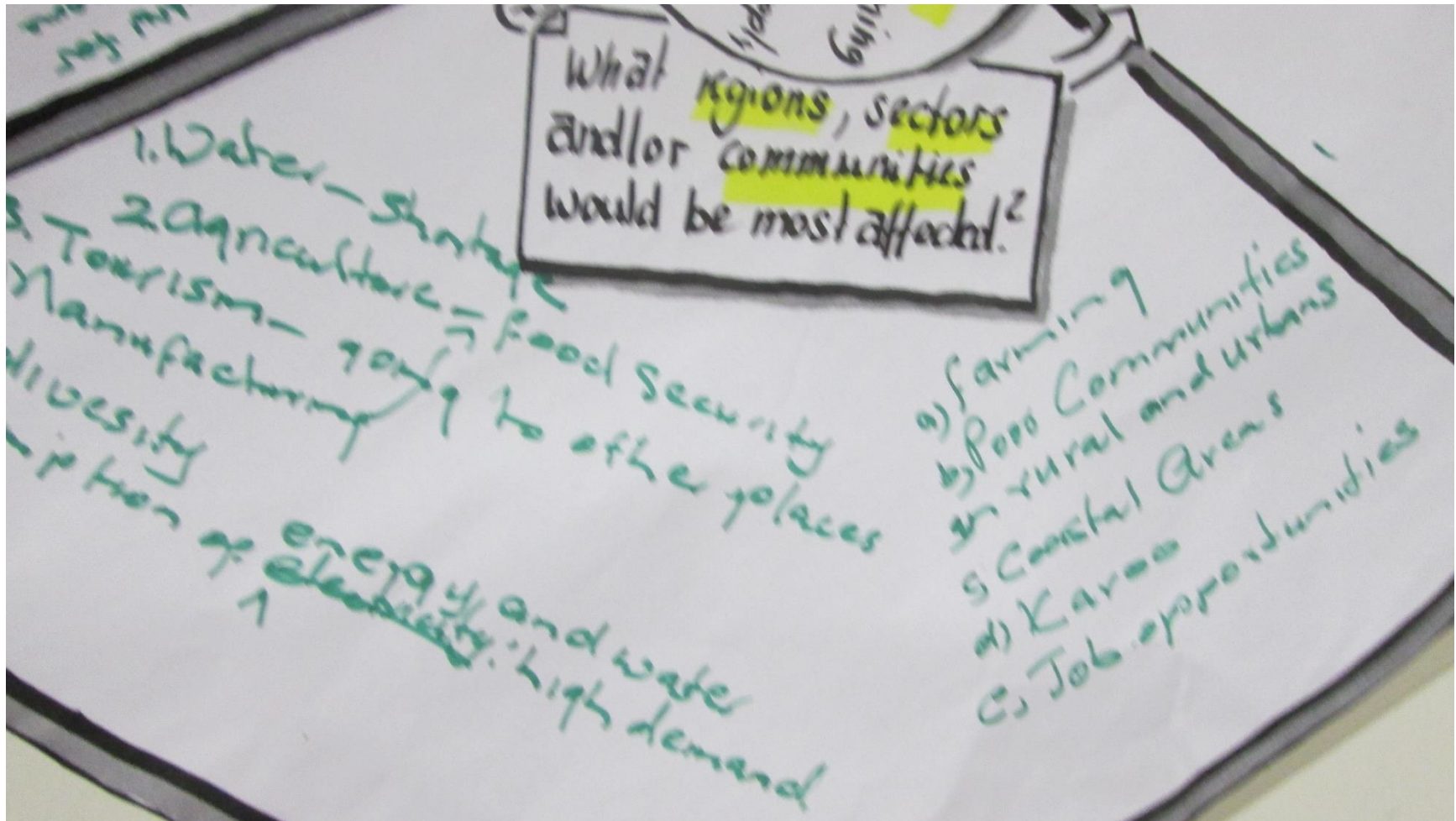




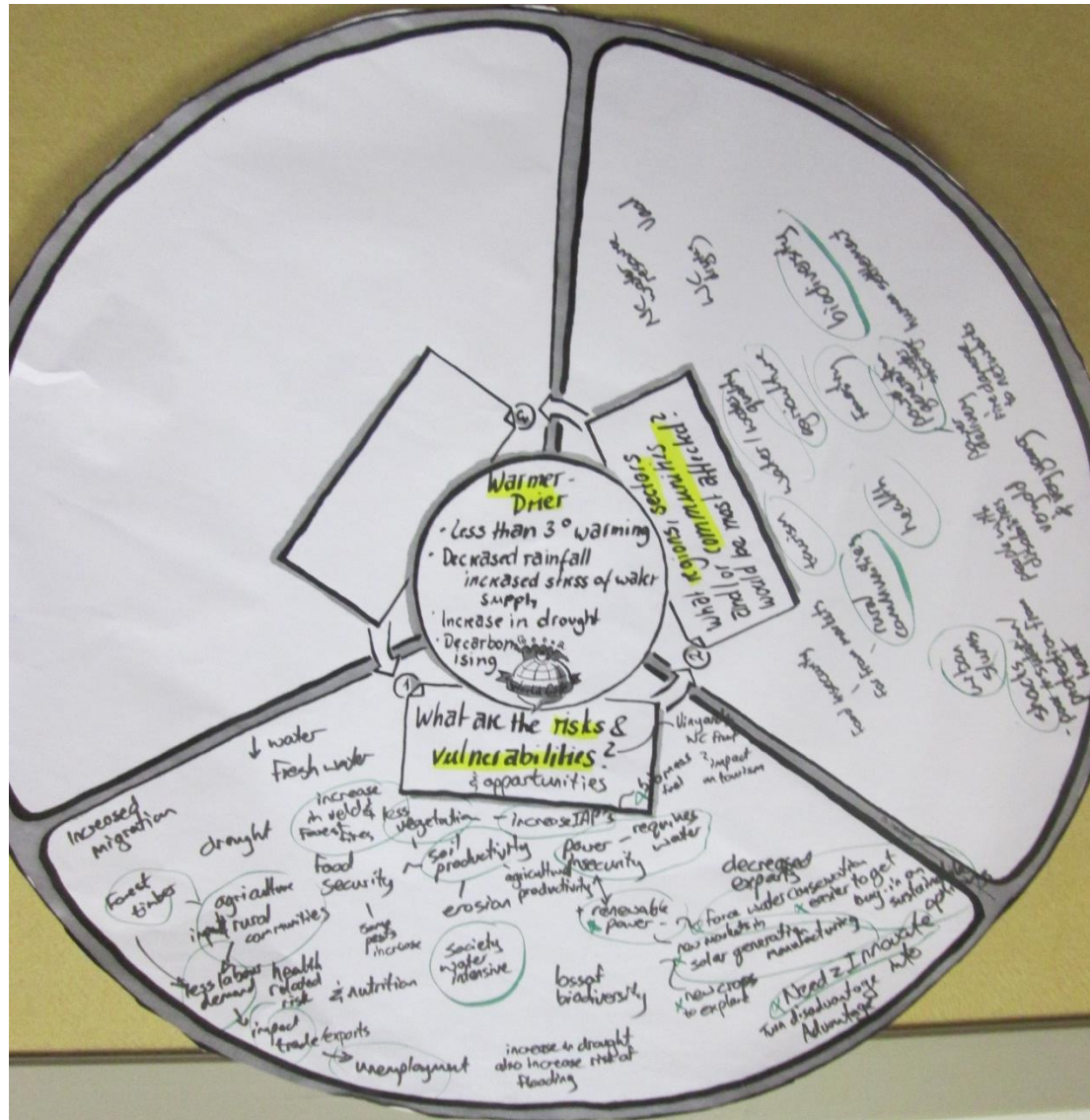
Warmer – Drier (I)



Warmer – Drier (I)



Warmer –Drier (II)



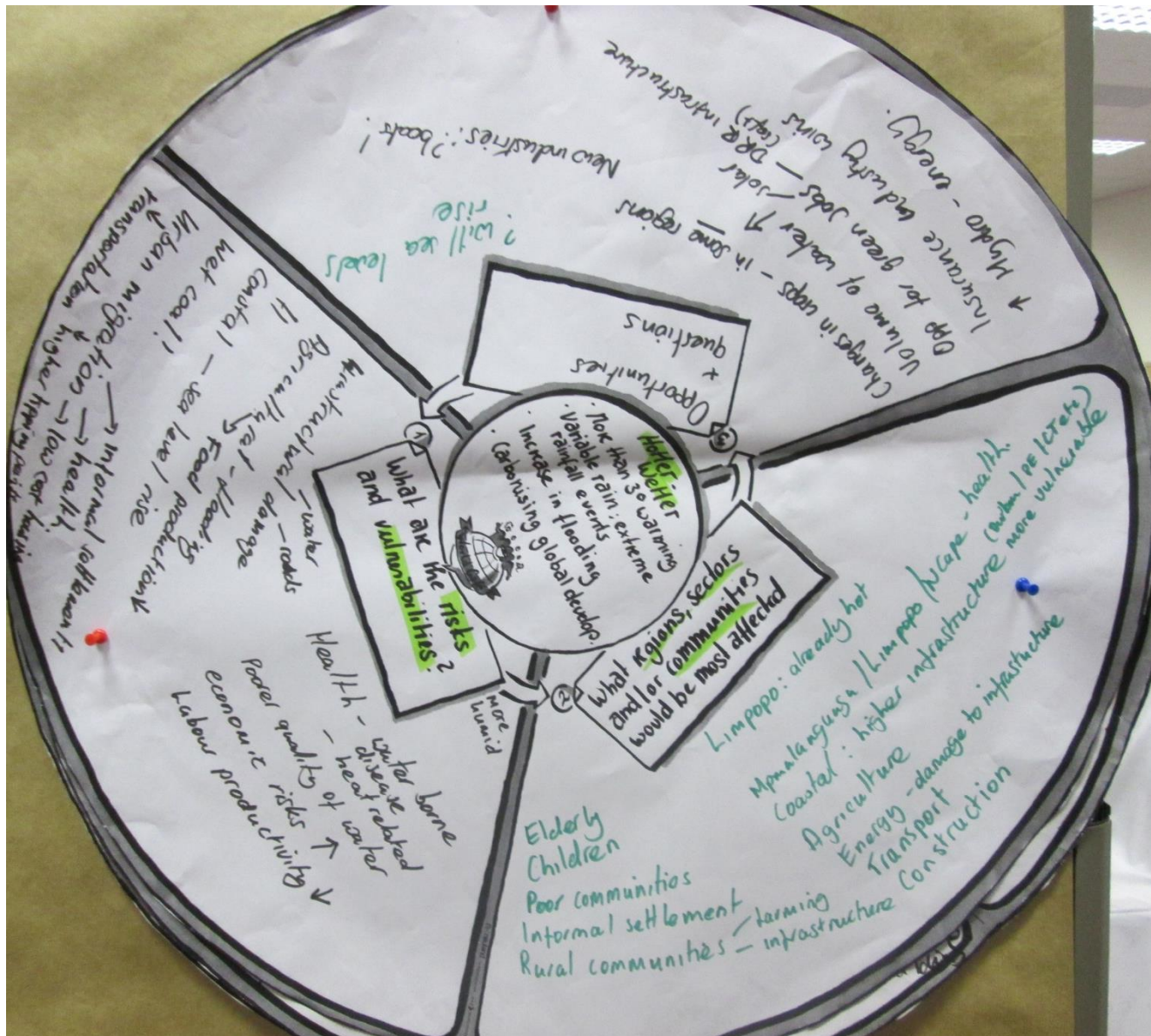
Warmer –Drier (II)



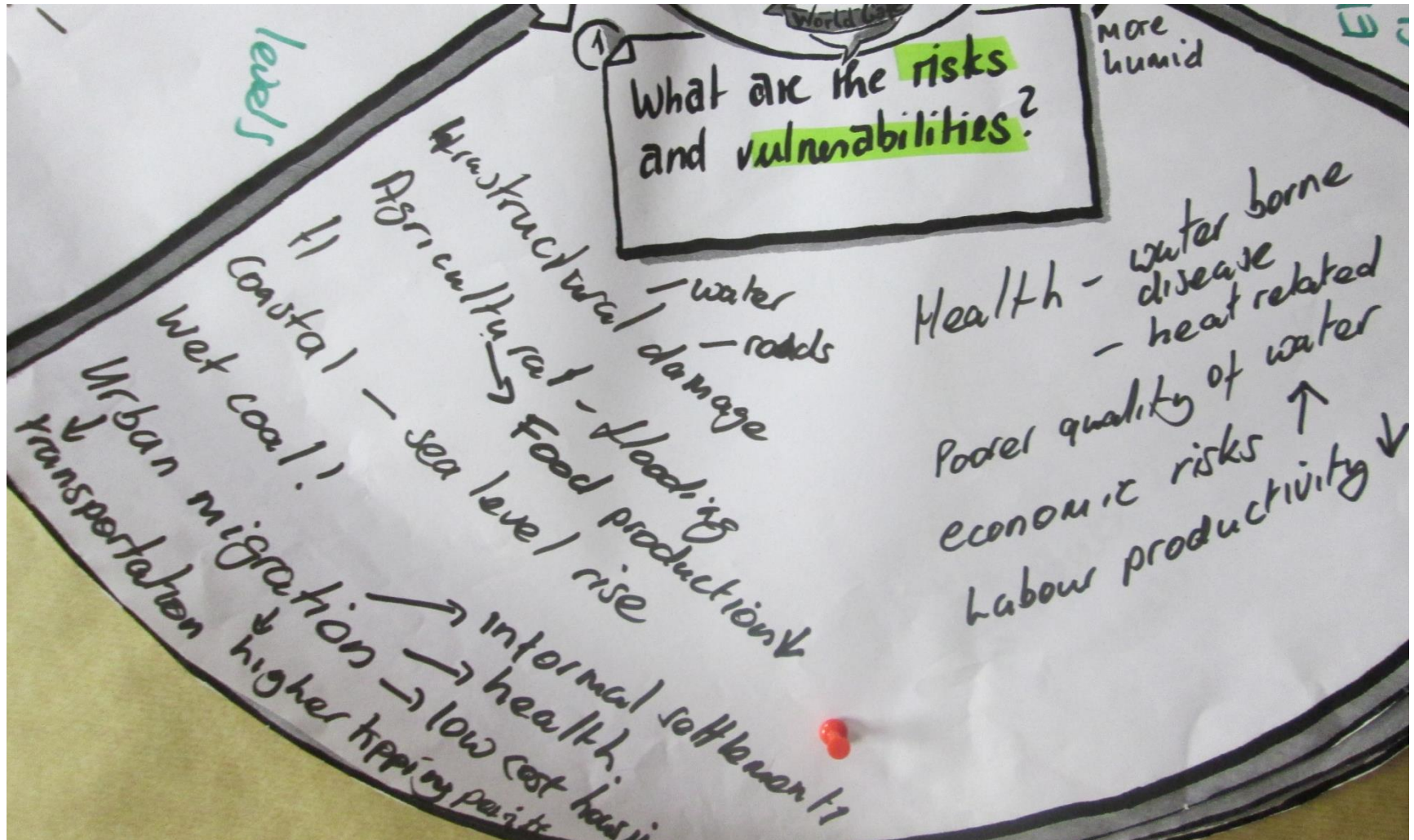
Warmer –Drier (II)



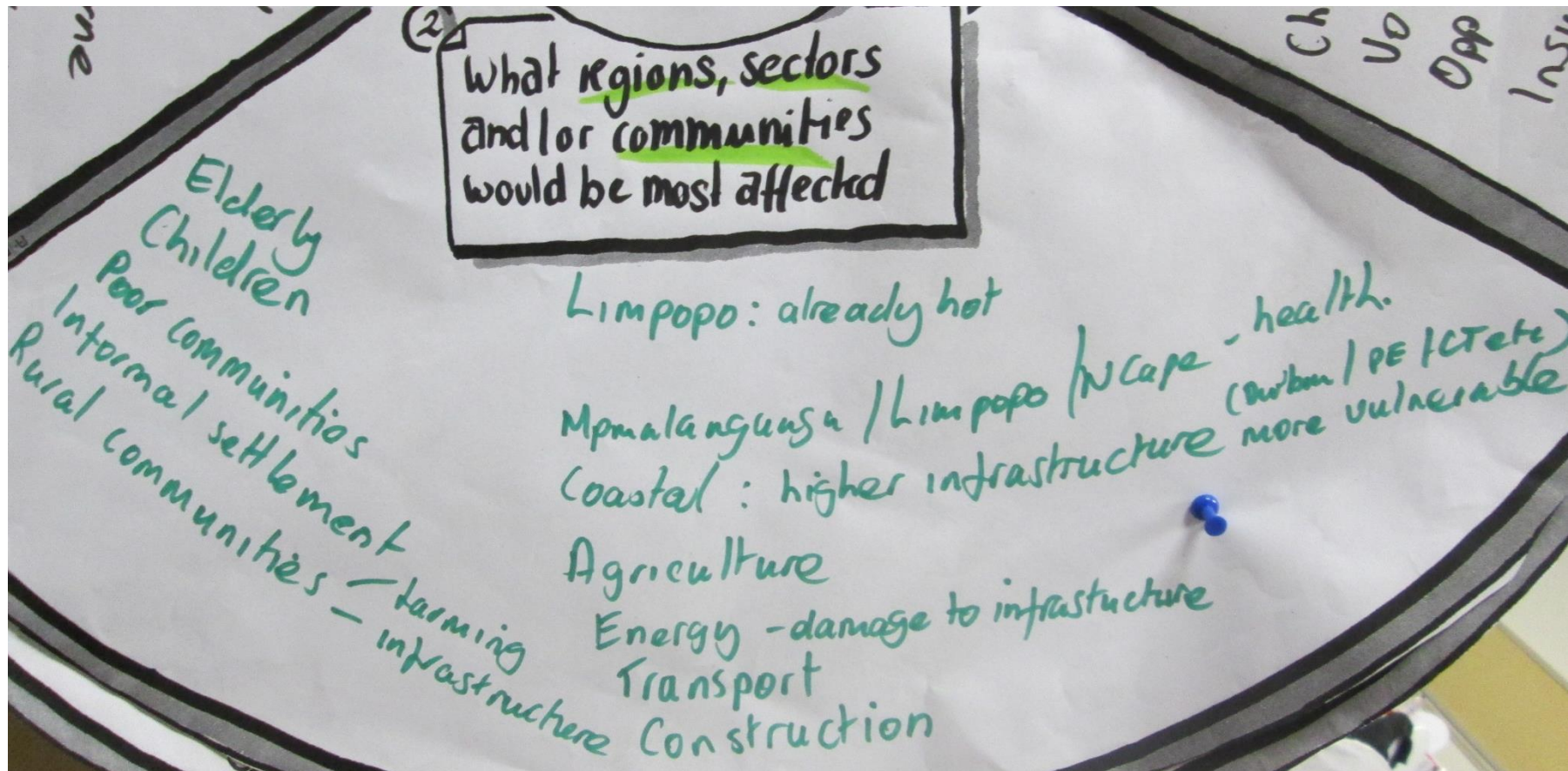
Hotter – Wetter (I)



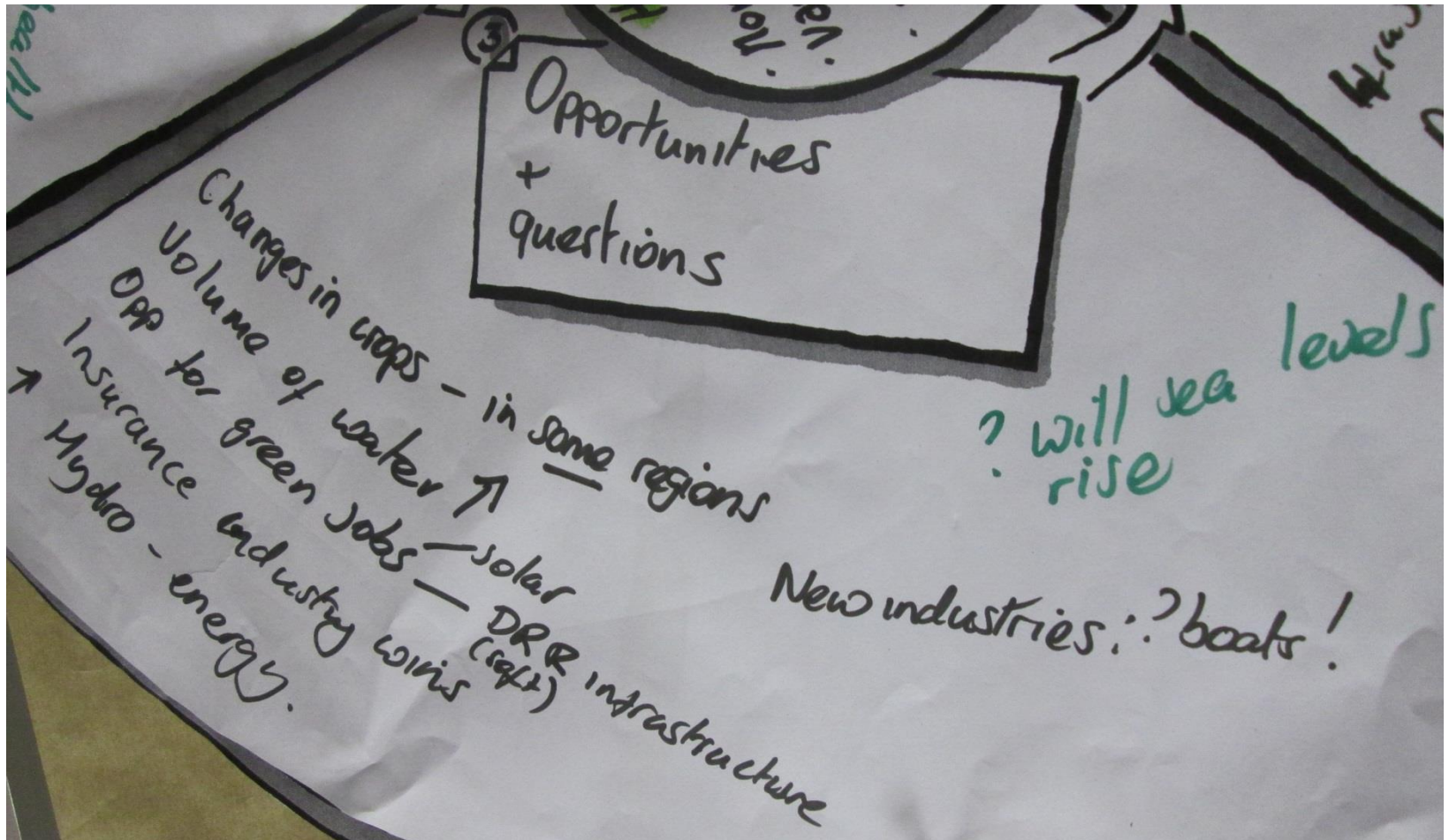
Hotter – Wetter (I)



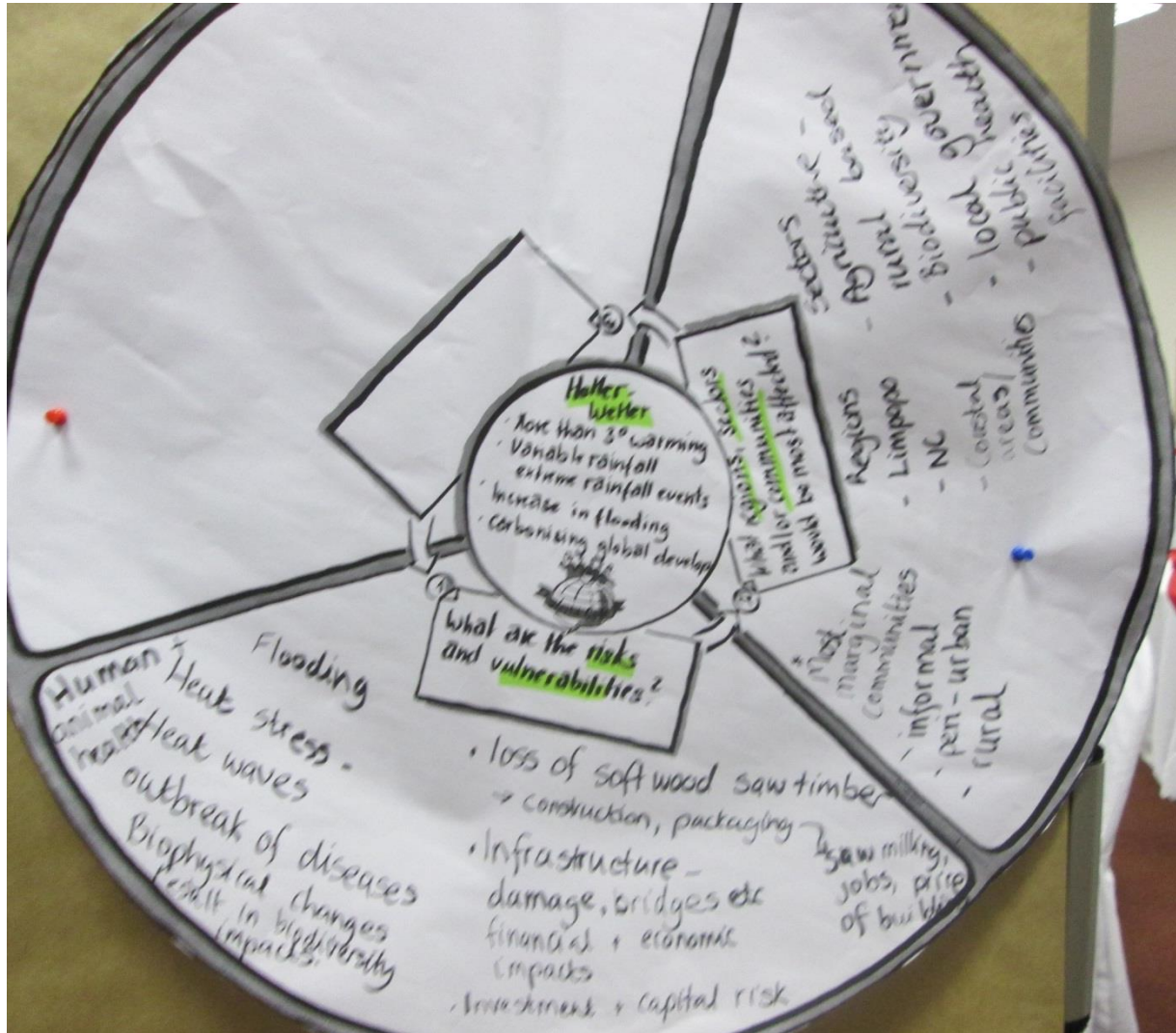
Hotter – Wetter (I)



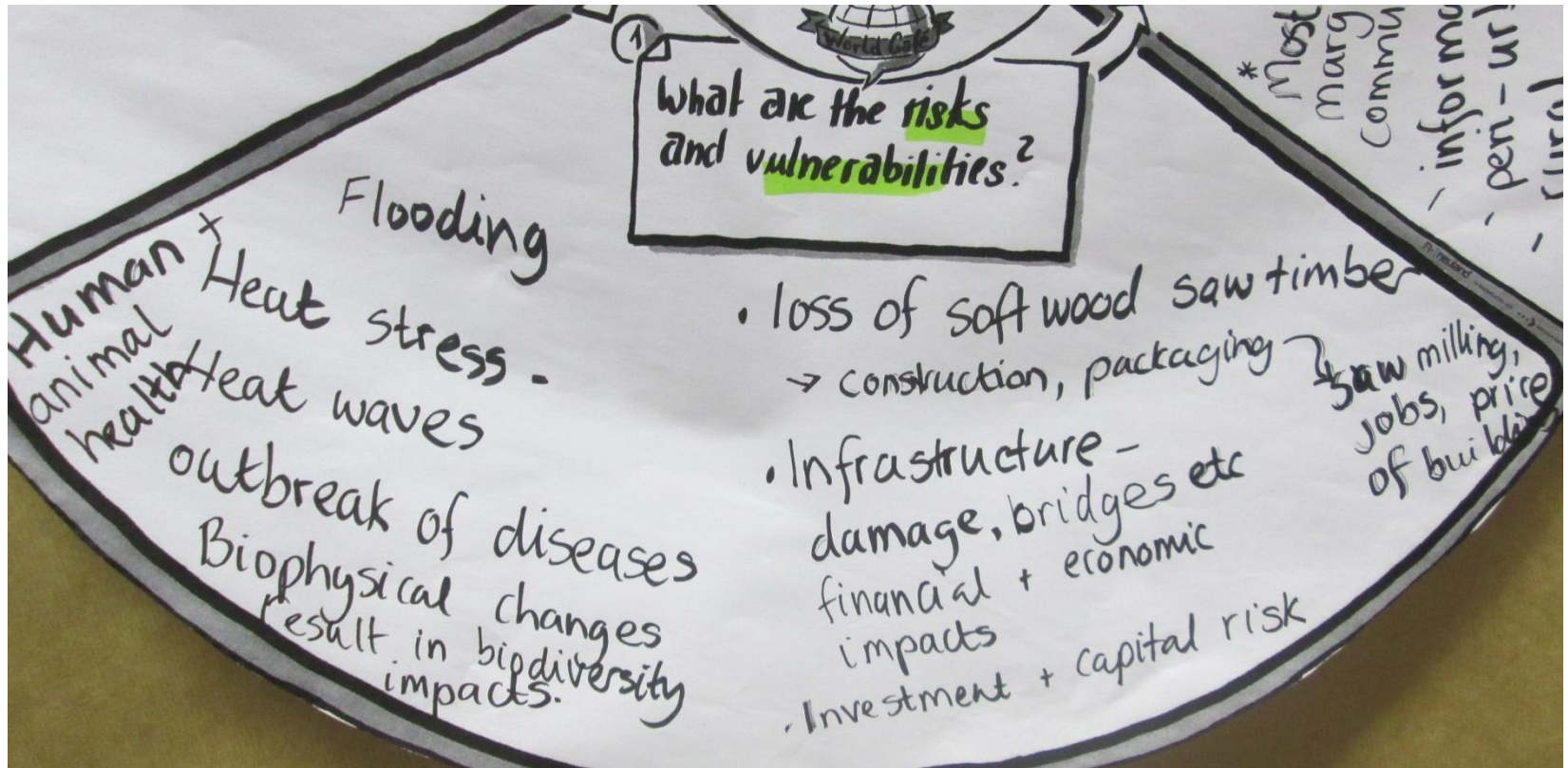
Hotter –wetter (I)



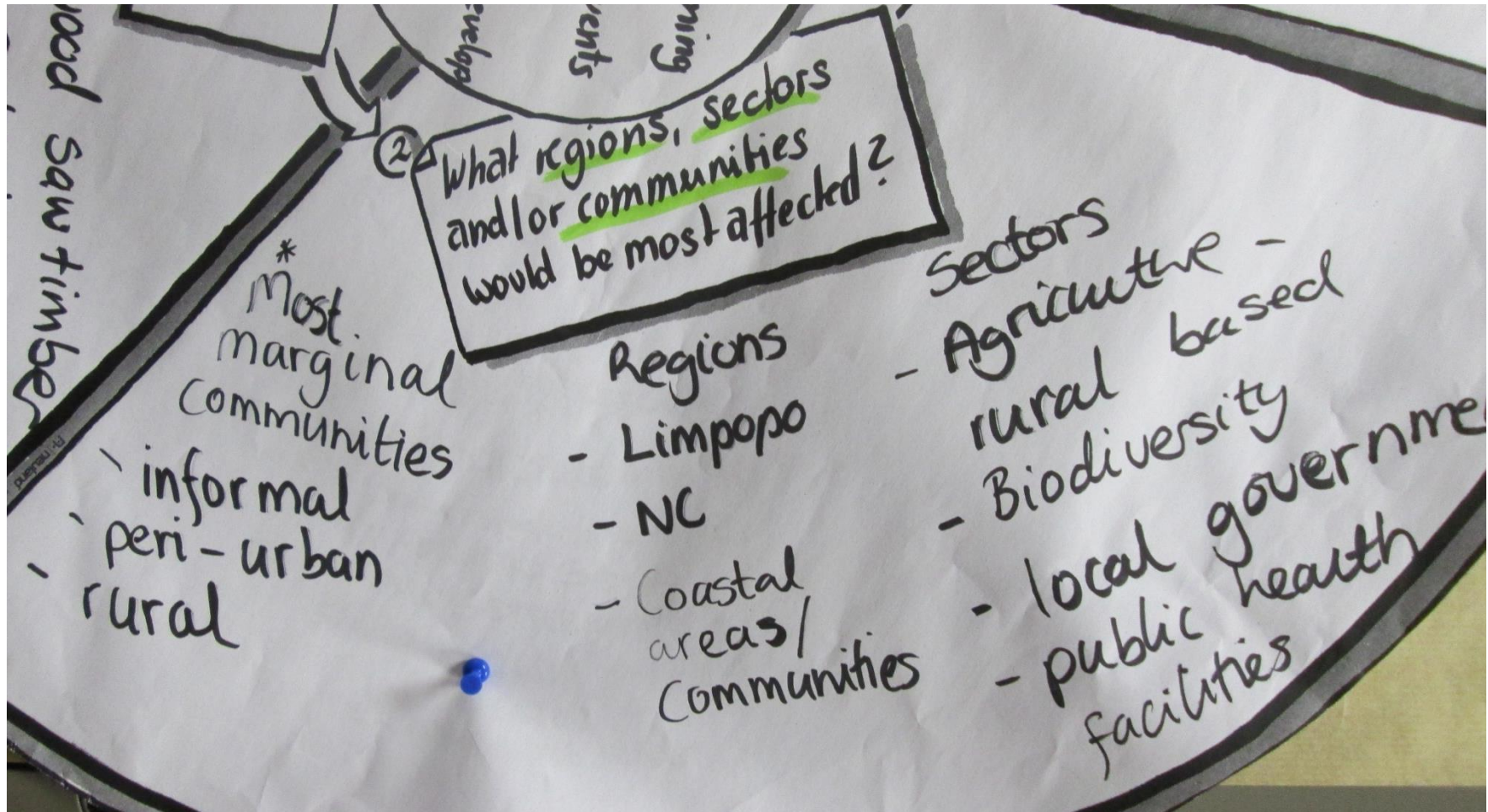
Hotter –wetter (II)



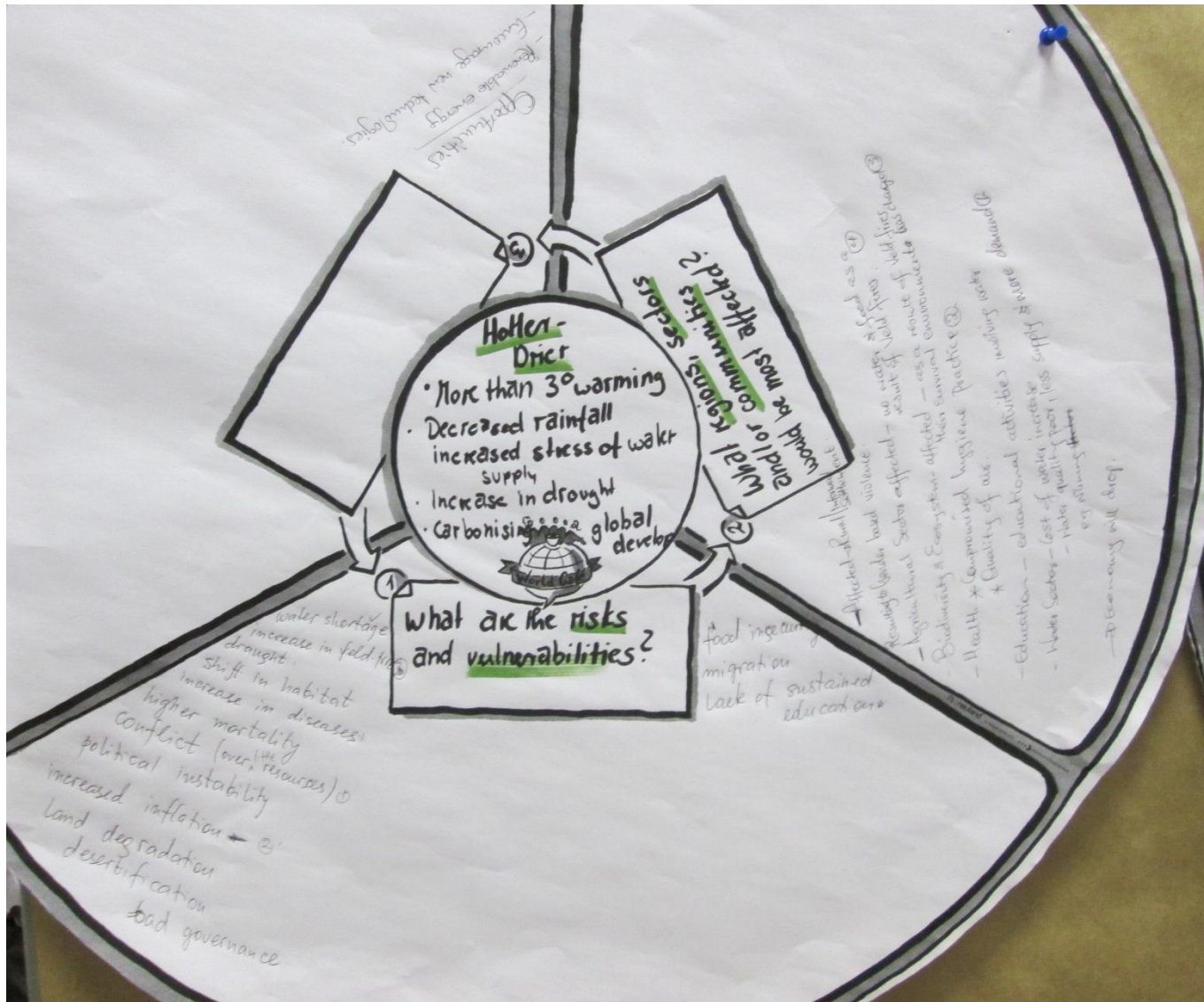
Hotter –wetter (II)



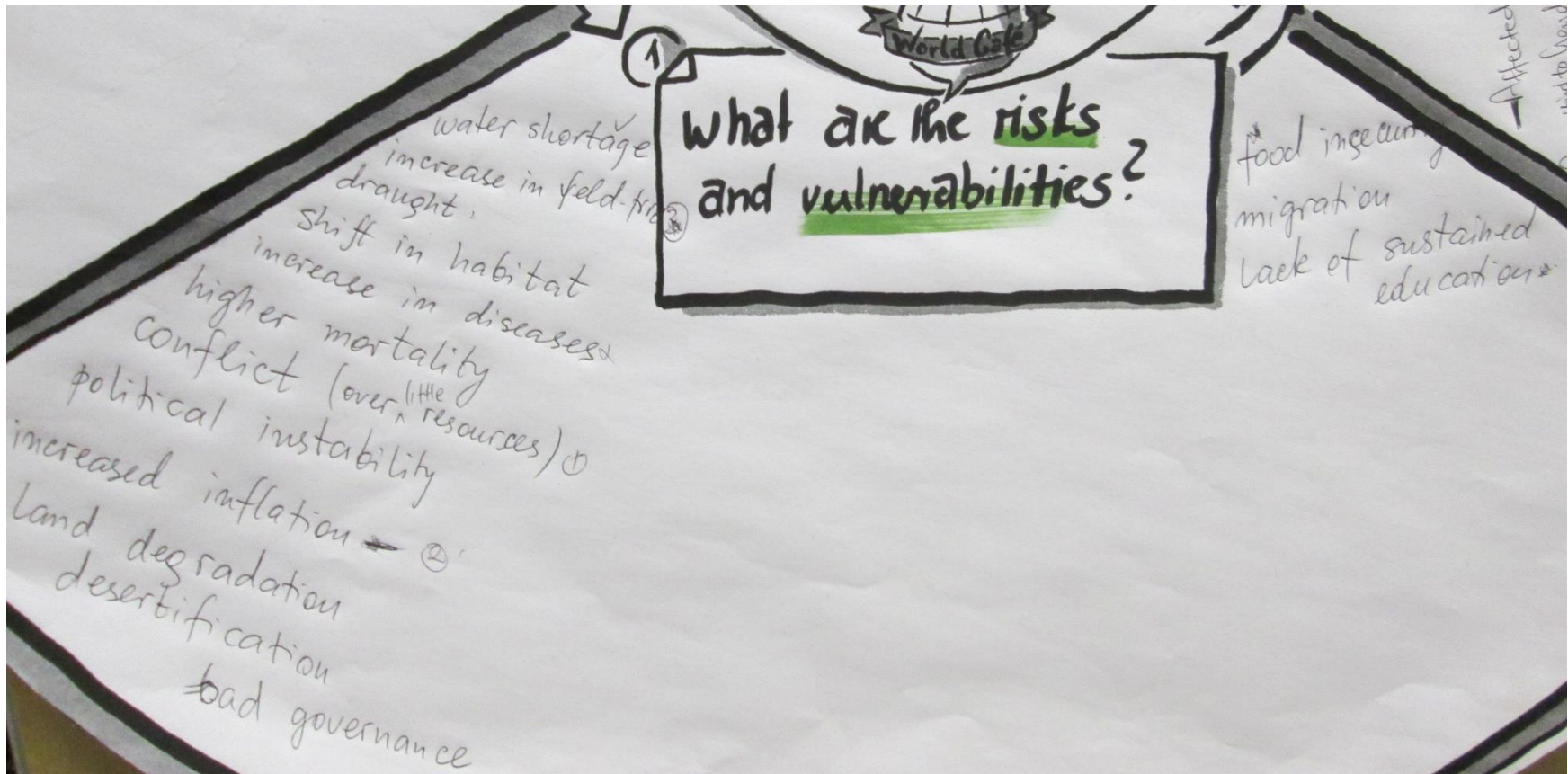
Hotter –wetter (II)



Hotter – Drier (I)



Hotter – Drier (I)



Hotter – drier (I)

② What regions and/or communities would be most affected?

→ Affected → Rural/Informal Settlement.

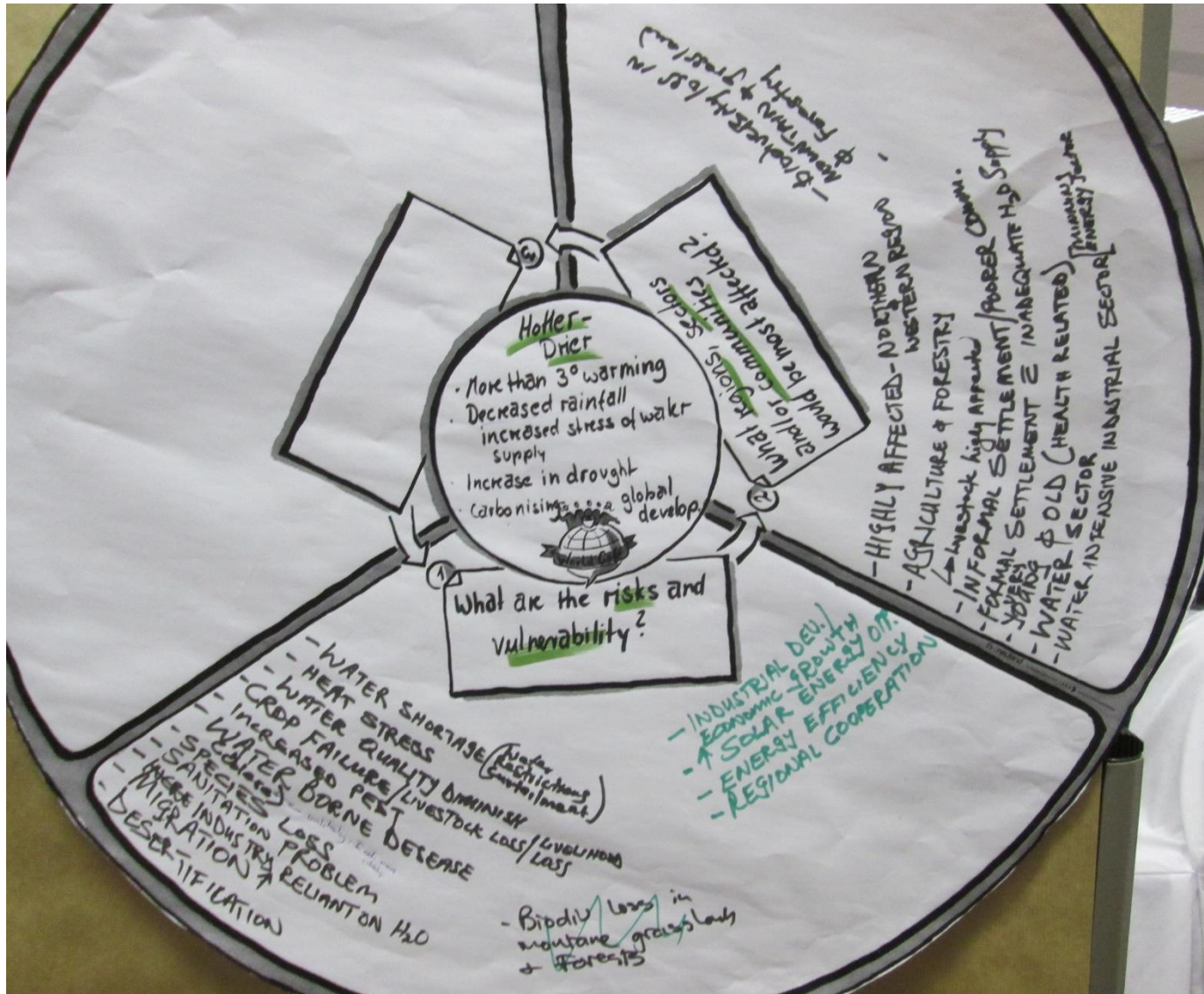
Resulting to Gender based violence.

- Agricultural Sector affected - no water & food as a result of Veld fires. ④
- Biodiversity & Ecosystem - affected - as a result of Veld fires their survival environments was changed ③
- Health * Compromised hygiene practice ②
* Quality of air.
- Education - educational activities involving water
- Water Sector - Cost of water increase
- Water quality poor, less supply & more demand ②
eg. Mining sector
- Economy will drop.

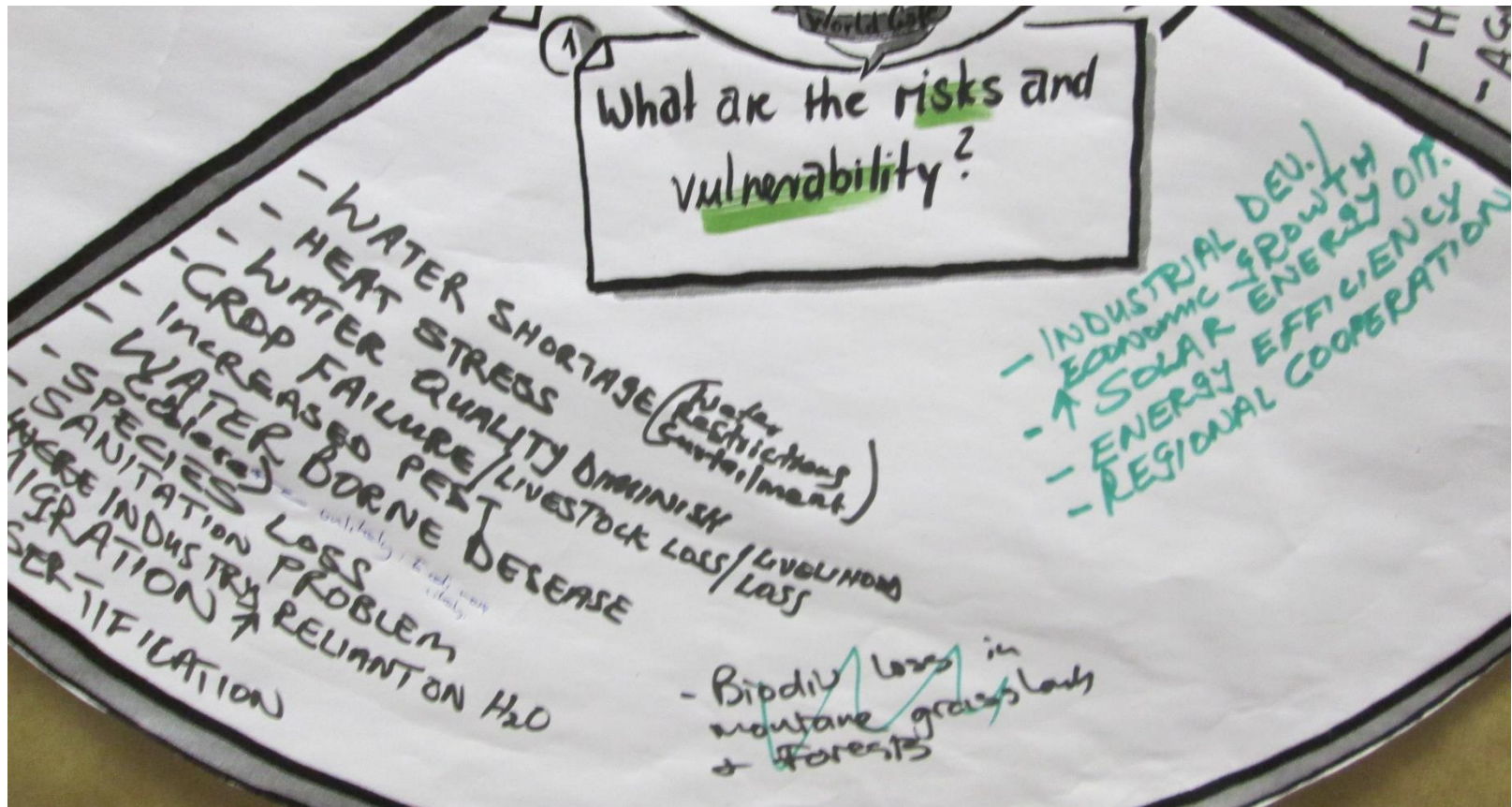
Opportunities

- Renewable energy
- Encourage new technologies.

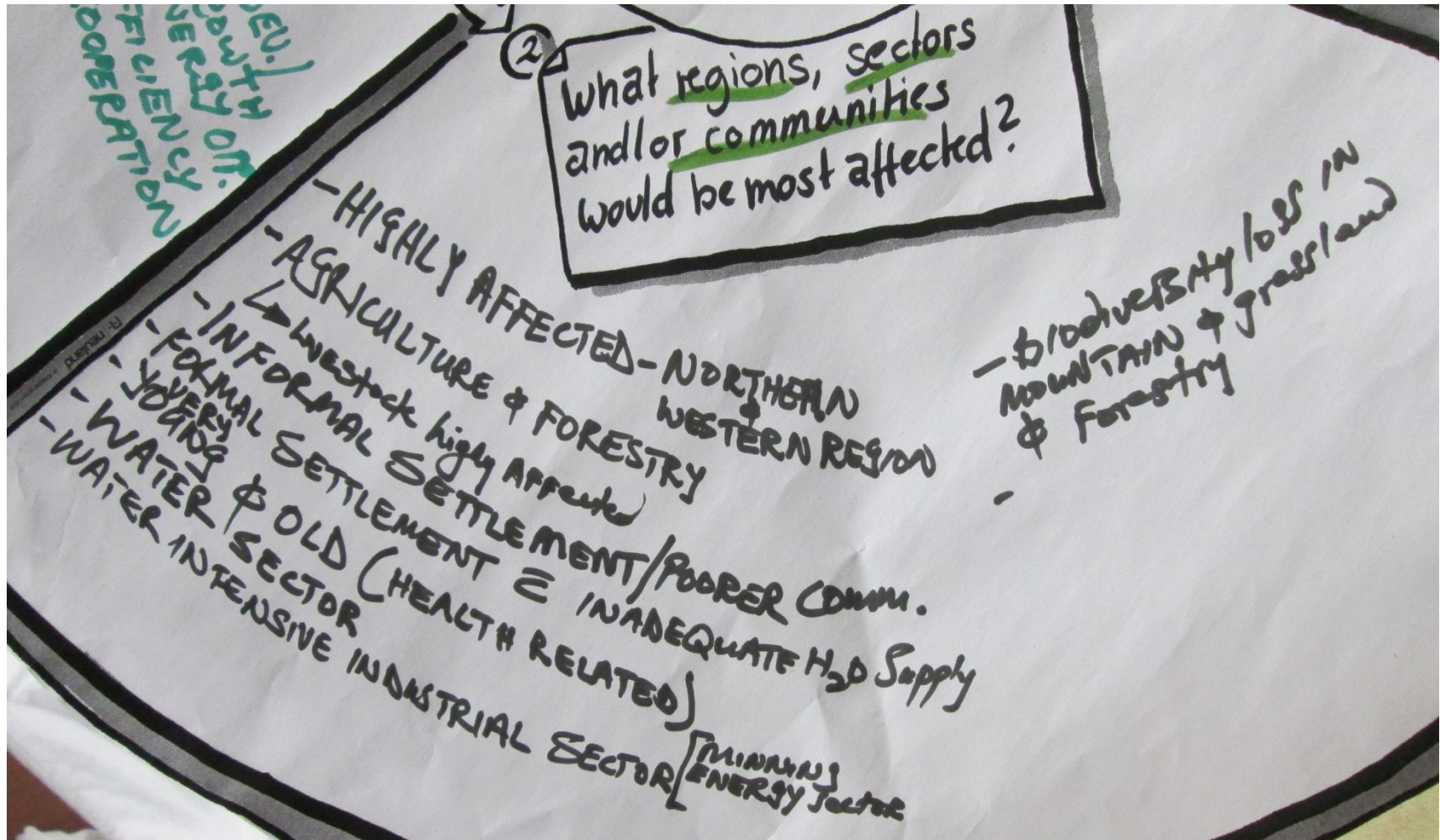
Hotter – drier (II)



Hotter – drier (II)



Hotter – Drier (II)



Develop a Matrix on Adaptation Responses

Break away groups



Choose a climate-global future you are interested in and would like to discuss

⇒ 1 moderator &

⇒ 1 note taker per group

60 minutes for the group work



climate-global future

Adaptation Response	Scale	Sector	Timeframe	Type
==	=	-	=	=
==	=	-	=	=
==	=	=	=	=

Note: The more diverse the group, the better

Matrix on Adaptation Responses

Step 1: Welcome & Introduction 15

Step 2: Brainstorming on possible adaptation responses 20

Step 3: Group decides on which adaptation responses they want to work on (max.) 15

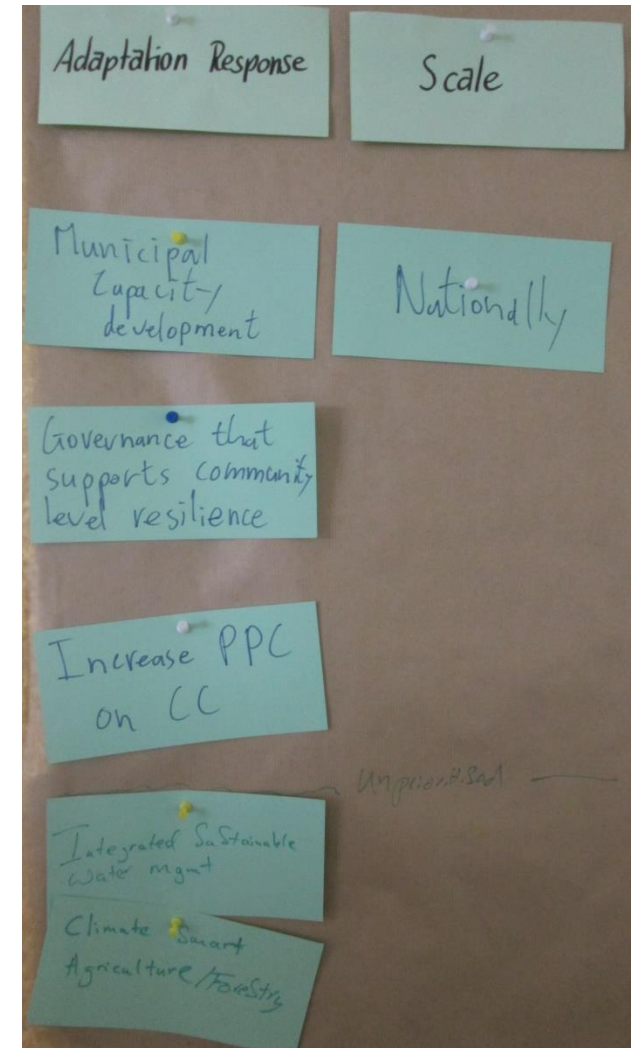
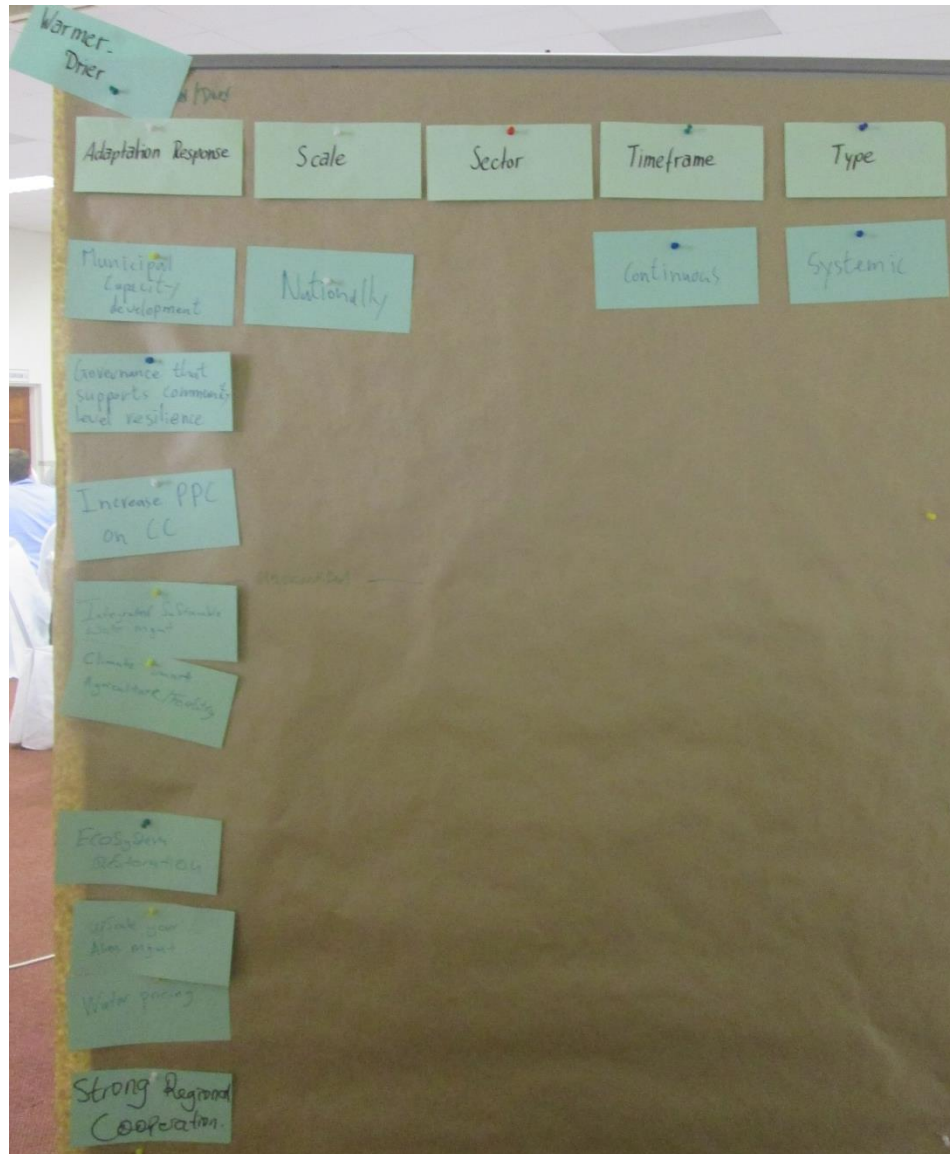
Step 4: Fill in the matrix for each adaptation response 25

Step 5: Brief summary & closing 15

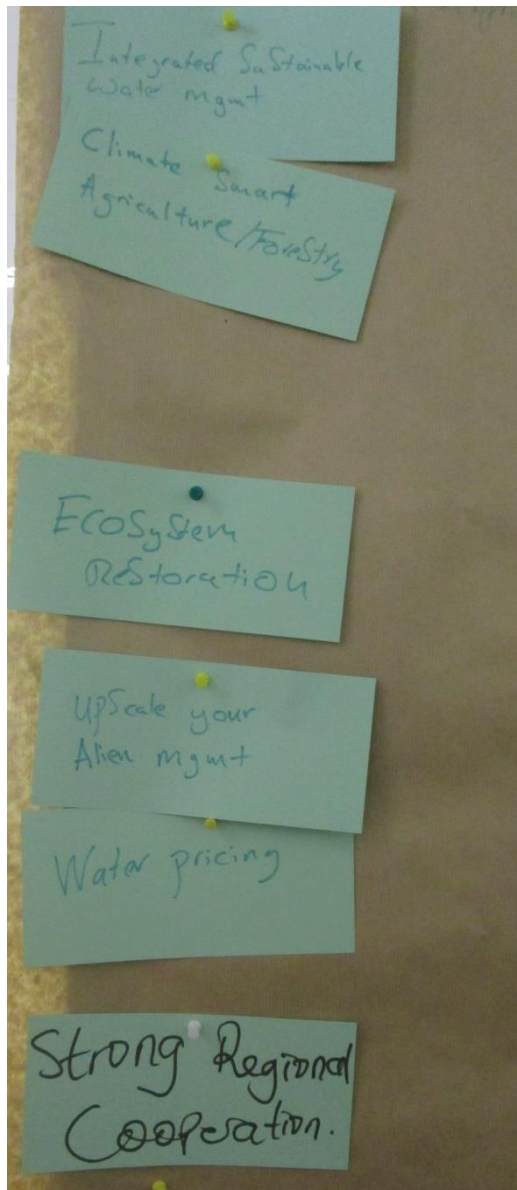
60

Step 6: Presentation of results in plenary 15 each

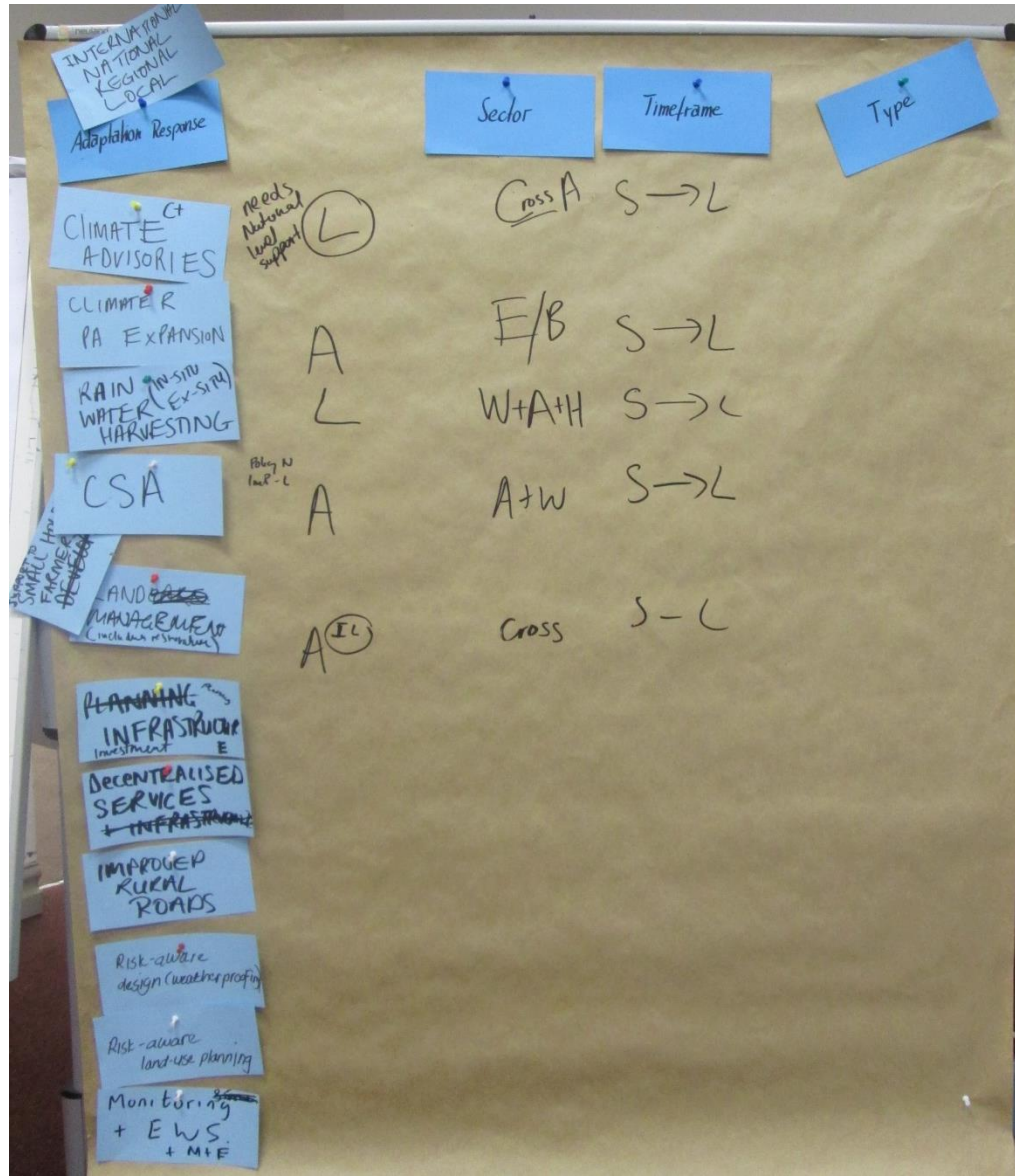
Matrix: Warmer - Drier



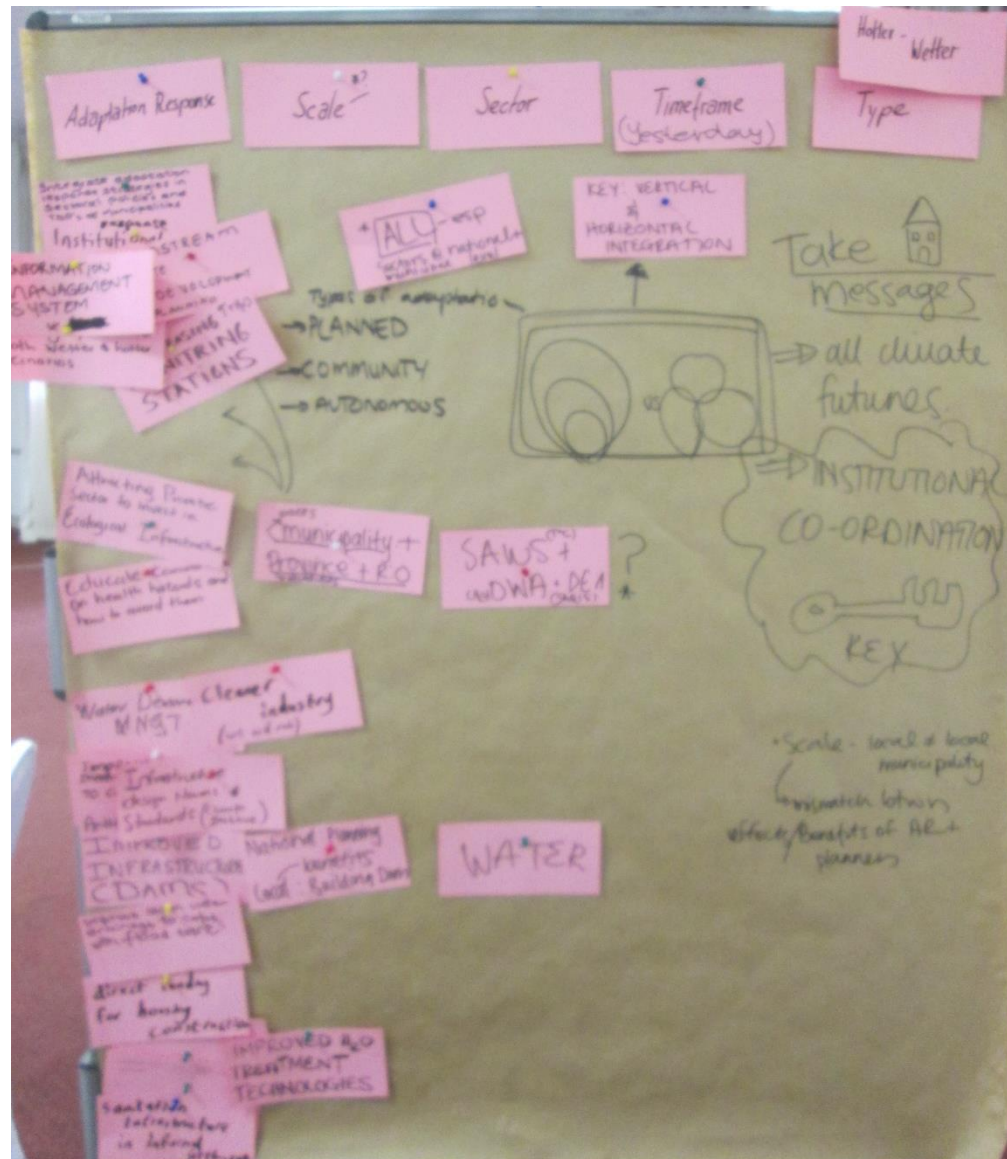
Matrix: Warmer - Drier

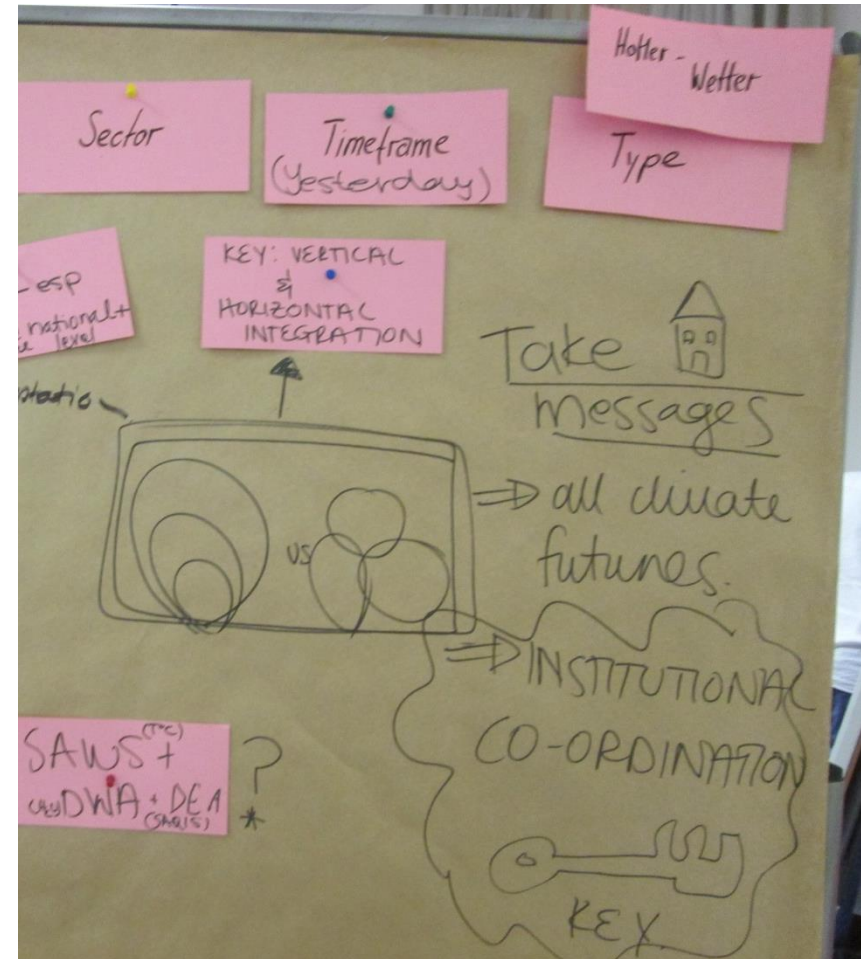


Matrix: Warmer - Wetter

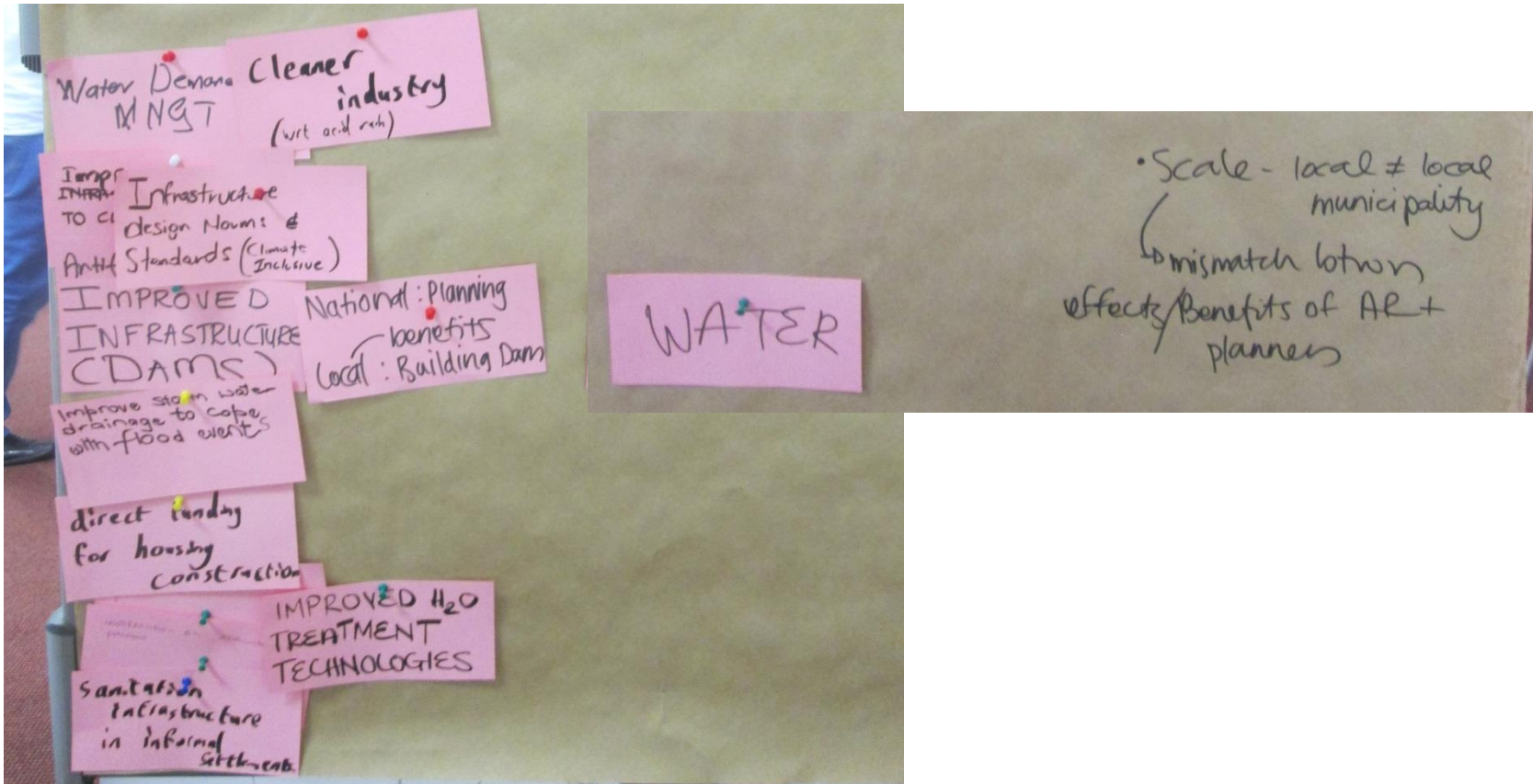


Matrix: Hotter - Wetter





Matrix: Hotter - Wetter



Matrix: Hotter - Drier

Hotter - Drier
"Carbonyl"

Adaptation Response	Scale	Sector	Timeframe	Type
Affordable, well insulated housing, walk places, schools, well engineered closed cycle water systems (urban water)	Local authority	Urban env housing	0-10 →	Specific
Green (urban) environment	Local	Water / municipal / agric (cabb)	10-20+	Sy ?
Water allocation away from agric - but to urban needs	Local	Env & Urban	0 → 40+	Sy
Protect forests highlands / increasing (PFS) catchments	Natl + CMA	Agric / Mining / Water	5 → 30	Sy
Virtual water (what from local)	Internatl + CMA	Water & DIRCO	20-50	Sy
Water Policy - Water pricing incentive for demand side management	SADC	NPC NT	30-60	Sy
Production, then demand side of (cabb) (municipal) price & incentives, behaviour, desalination, implementation	Natl - city - local	Water, Treasury, Agric, urban, other sectors discussion	0 → ...	Sy
Policy decisions and allocation of funds (inputs for food security)	City - local	Agric / Water / Env	0 →	Sy
Build 80 areas - tourism destinations (with urban - agricultural)	Local	Municipal	20 →	Sp
Regular storage (as needed)	Natl + local	Agric, health, security, dirco, Treasury, NPC	10-30 →	Sy
Water providing area of crops (e.g. wheat)	Natl	Science / Research / Councils / HEI	0 →	Sp + Sy
	Natl vs local conduct	Energy, mining, env, bd	10-15 →	Sy (Sp)
	Provincial	Tourism / Env	15-20 →	Sy
	Local - city	Water	10 →	Sp

(SADC + city) most regional - catchment / business

Matrix: Hotter - Drier

Hotter - Drier "Carbonising"	Scale	Sector	Timeframe	Type
Adaptation Response	Local authority	Urban env Housing	0-10 →	Specific
Affordable, well insulated housing, work places, schools	Local	Water/ municipal services	10-20 ⁺	Sy ?
Well engineered closed cycle water systems (purification recycle (non water) waste elim)	Local	Env & Urban	0 → 40 ⁺	Sy
Densified Green urban environment	Natl → CMA	Agric Services Mining Water	5 → 30	Sy
Water allocation away from agric - link to urban needs Industries	Internatl. → CMA SADC	Water & DIRCO	20 - 50	Sy
Protect Lesotho highlands / Drakensberg (PES) catchments	SADC	NPC NT	30 - 60	Sy
Virtual water investment (food from Congo)				

Matrix: Hotter - Drier

Matrix: Hotter - Drier

Left Column (Notes):

- Demand side management
- Proactive anti-degradation of (catchments: rangelands)
- m+E
- Incentives/enforcement
- desalination
- Implementation
- Policy decisions
- food sufficiency vs (making our own)
- imports for food
- Security
- Bulk ↑ R + D / training
- agric generate alt. to agriculture (financ)
- extension services
- Fracking vs wilderness experience (trade offs)
- Build BD areas - tourism destinations (grasslands, veld)
- (wild venison - organic meat)
- Aquifer storage (as needed)
- Water pricing
- allocation to crop
- price of crops →

Top Row (Notes):

- inter sectoral discussion
- Agric
- Water
- Env

Matrix Content:

Local	Local	Municipal
CMA - local	Local	National
National	Natl	Agric, health, security, dirco Treasury, NPC
Natl vs local conflict	Provincial	Science Research Councils HEI
Local - CMA	Water	energy, mining, env, bd
		Tourism Env

Right Column (Notes):

- 0 →
- 20 →
- 10 - 30 →
- 0 →
- 10 - 15 →
- 15 - 20 →
- 10 →

Sy

Sp

Sy

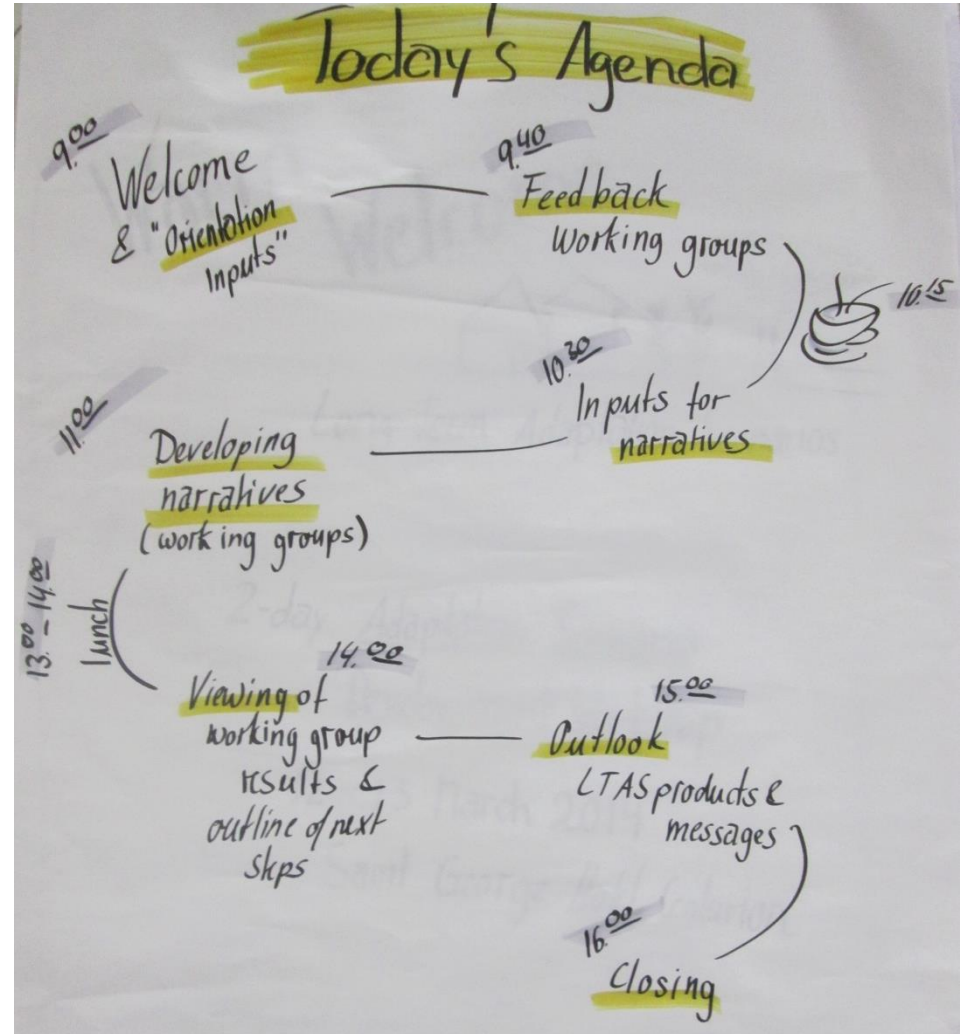
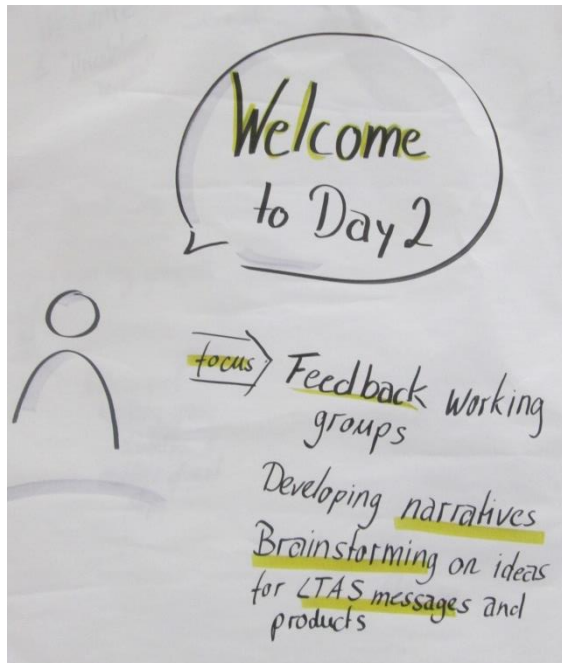
Sp + Sy

Sy (Sp)

Sy

Sp

Day 2



Working Groups: developing narratives

Working Groups

Step 1: Review

Look at the 5 core themes you discussed yesterday



Step 2: Jump to the year 2050 (imagine how South Africa looks like under your climate future)

"What have been the opportunities and the trade-offs within the themes that South Africa has levered to become resilient?"

Step 3: Give your future a headline

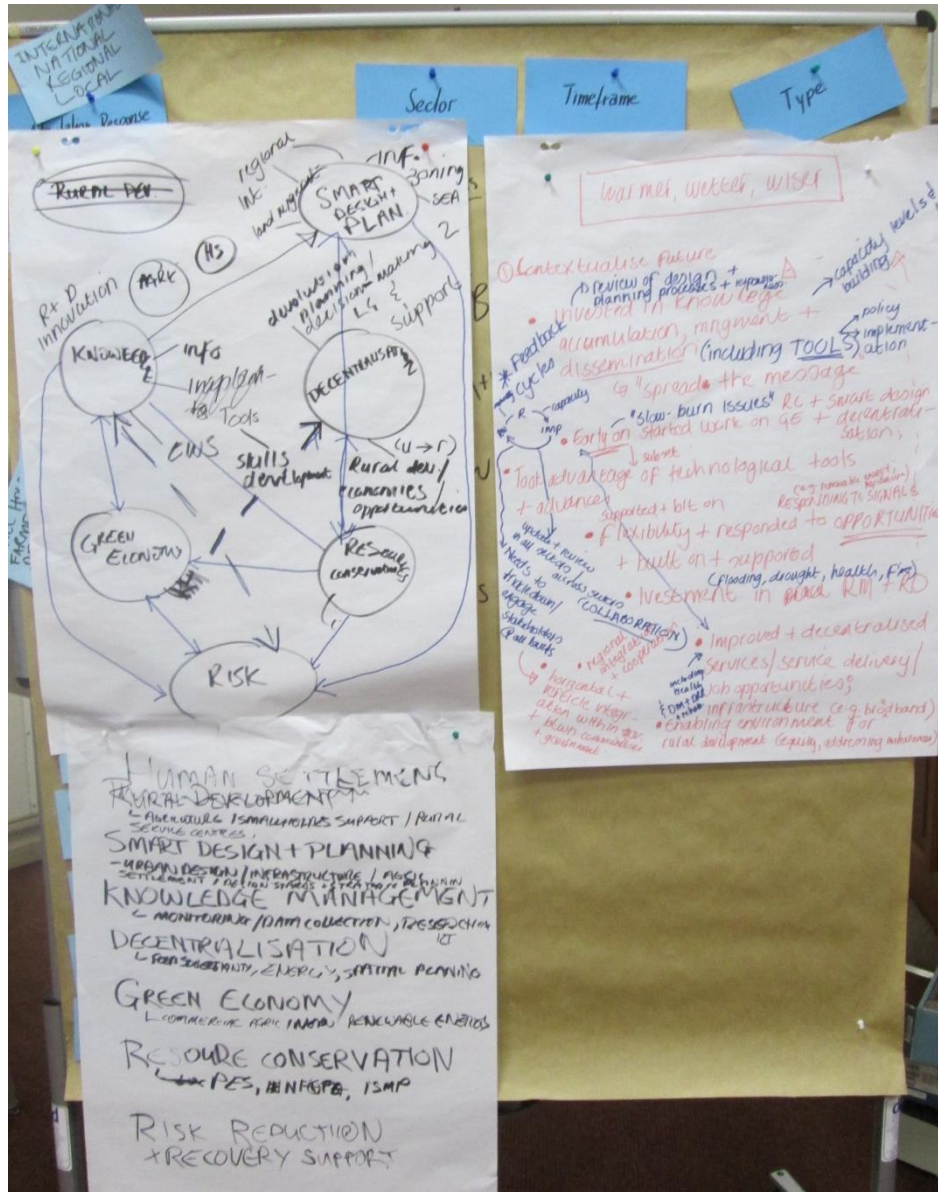
- describe the core themes
- what were the steps you took to get there?  (short, medium, long term)

HL: =

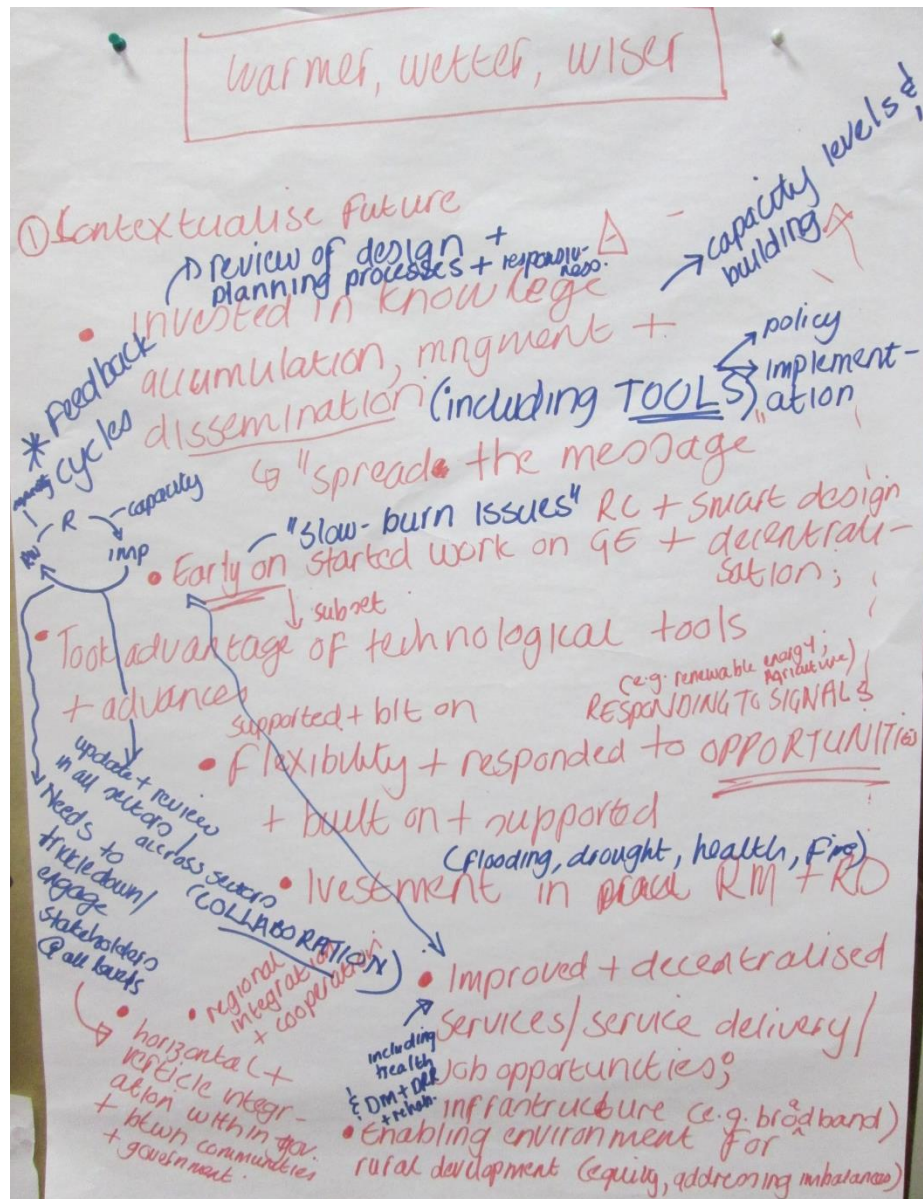
Description: =

Steps: =

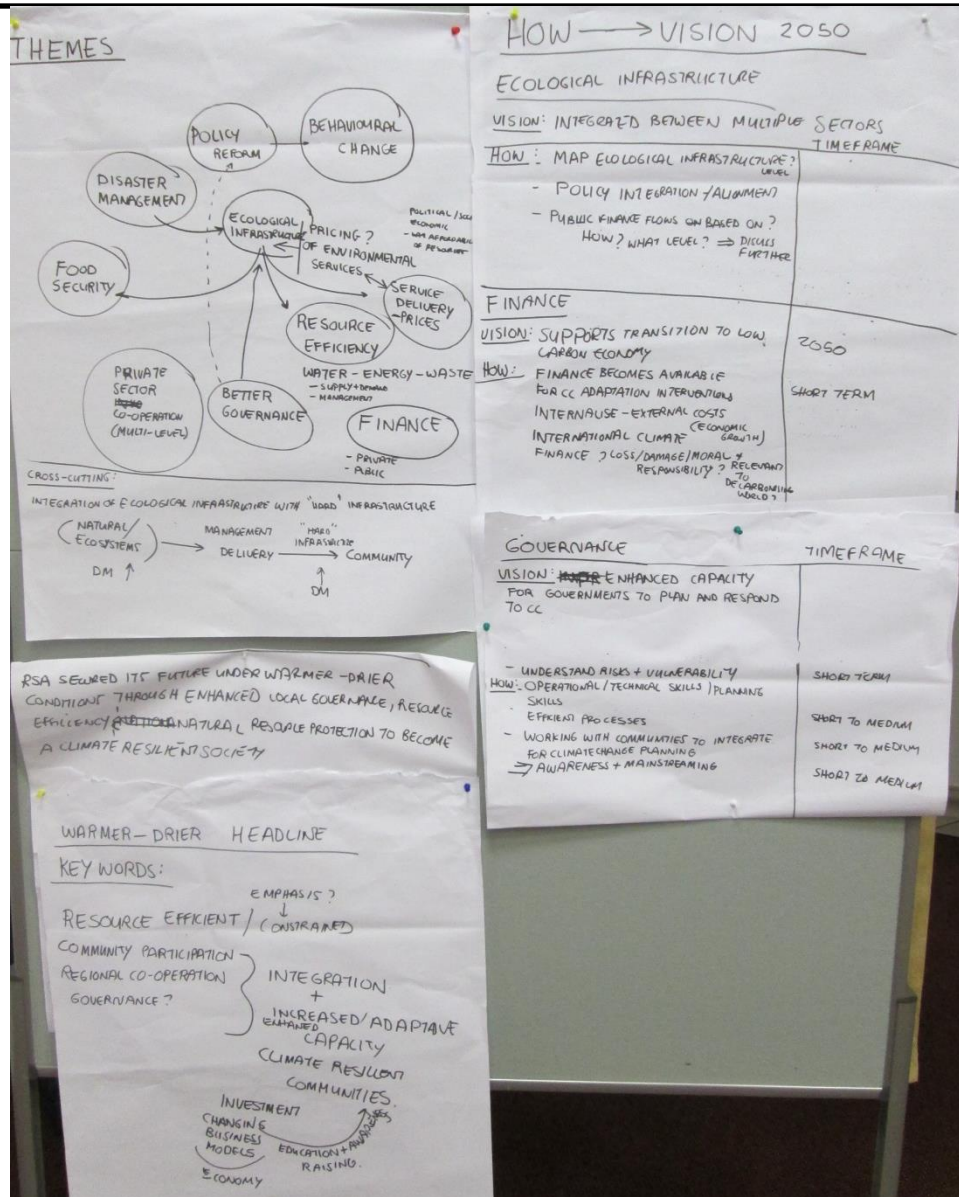
Narrative: Warmer - Wetter



Narrative: Warmer - Wetter



Narrative: Warmer - Drier



Narrative: Hotter - Drier

SUNNY RESILIENT CITIES  **CLOSED WATER SYSTEM**
(Deliberately slightly leaky)

PROACTIVE URBANISATION
URBAN ROMANTICISM

- * Desalinated & well engineered Services
- * Restructuring Agriculture
- * Migration Problems
- * Rural landscapes Improvement
(Cultural and aesthetic VS Rural Production)
- * Intensified Education & Training (Jobs)
Service Based Economy
- * Affordable well insulated housing
- * Equitable land allocation & distribution
- * Integrated neighbourhoods
- * Urban greening (Cooling)
VS
Air Conditioning

Water Protection Strategies

- Protect Catchments
- Water pricing and allocation
- Shortfall for Agric (Virtual Water)
Agric Imports * - longer term regional integration

Aquifer Storage VS Dams

Change landuse

- Economic acts in rural areas shifts
- Target niche crops - Free range beef
Wild Venison
- Rural Production
 - Recreation
 - Cultural farms
 - Water factories

- * Maintenance of healthy Ecosystem
 - Incentives for proactive catchment & rangelands management
 - PES for protection of L^{and}scapes
 - Water factories
 - Build Ecological Infrastructure (SIPi9 - Part of the urban design)

Timeframes

Many mechanisms already exist.

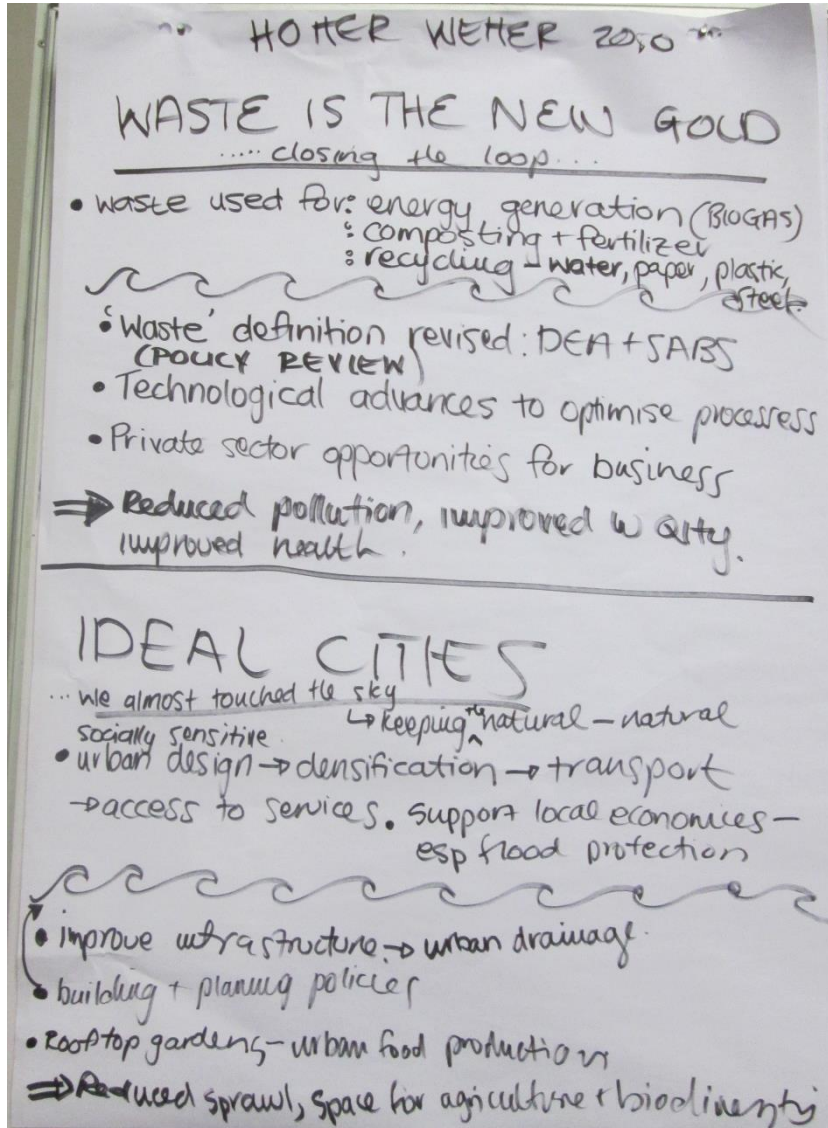
Requires ++ capacity building now for implementation

Regional integration - longer term (up to DRC)

Narrative: Hotter - wetter



Narrative: Hotter - wetter



Brainstorming on products and messages

Looking ahead -
products and messages of LTAS

"Which products and messages
need to be created to break
these LTAS scenarios down to"

- National

National

- Provincial

Provincial

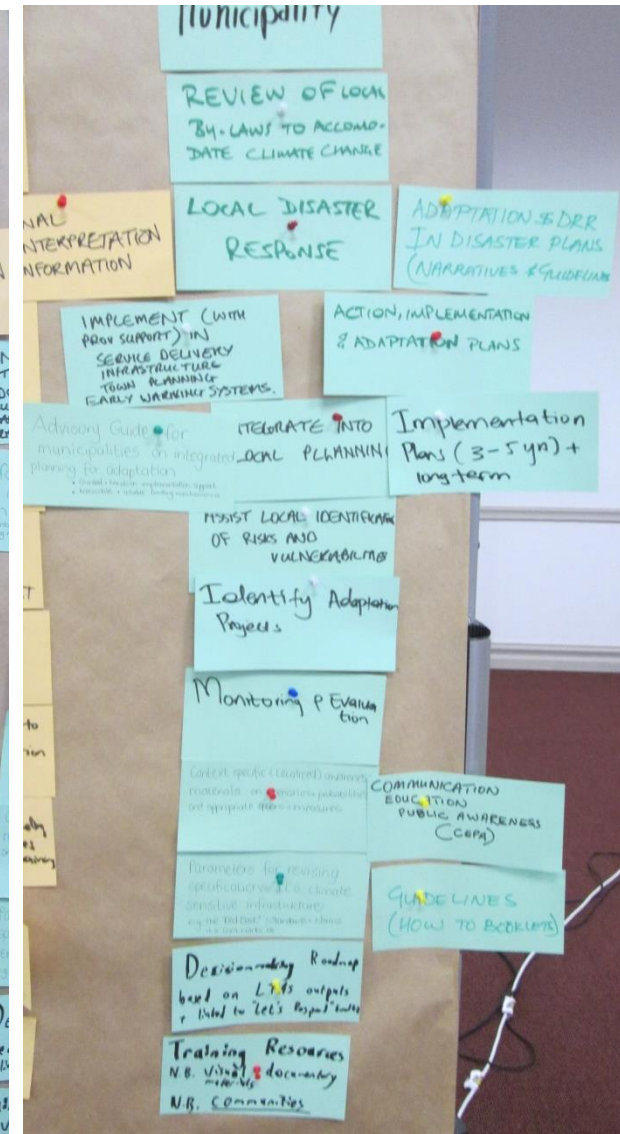
- Municipality

Municipality

⇒ Please discuss at your table
and write up to 3 ideas for each
sphere of government

'15

Brainstorming on products and messages



Impressions





**Best wishes
Ilka Stein**