The Humanitarian-Development nexus

A focus on food security & sustainable development

Carmen Torres Ledezma

NOHA Winter School - Pavia, November 2017

ecdpm

Programme

9:00-9:15	**About ECDPM**
9:15-9:30	**Warming-up: The humanitarian-development nexus: inter-related challenges**
9:30-10:15	**Climate change, conflict, migration and food security**
10:15-10:30	*Q&A – Coffee Break*
10:30-11:00	**The nexus between migration and food security**
11:00-11:15	*Q&A*
11:15-11:45	**Policy coherence for food security**
11:45-12:00	*Q&A*
12:00-13:00	*Lunch*

ABOUT ECDPM

The European Centre for Development Policy Management (ECDPM) works on international cooperation and development policy in Europe and in Africa, the Caribbean and the Pacific (the ACP). Over the past 29 years we have built a strong reputation as an independent 'think and do tank'.

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OUR MISSION

To inform policies and help make them work for sustainable global solutions. We do this (1) by providing independent policy research, analysis and advice; (2) by brokering dialogue in complex policy processes; and (3) by working with a broad range of partners throughout the world.

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HOW WE WORK

"ECDPM's key strength is the way we work. We call ourselves a 'think and do tank' because we go beyond policy research and analysis, to also act as an advisor, to bring people together, and to actively collaborate with our partners to address policy implementation challenges."

Jean Bossuyt
Head of Strategy

ecdpm

WHAT WE DO

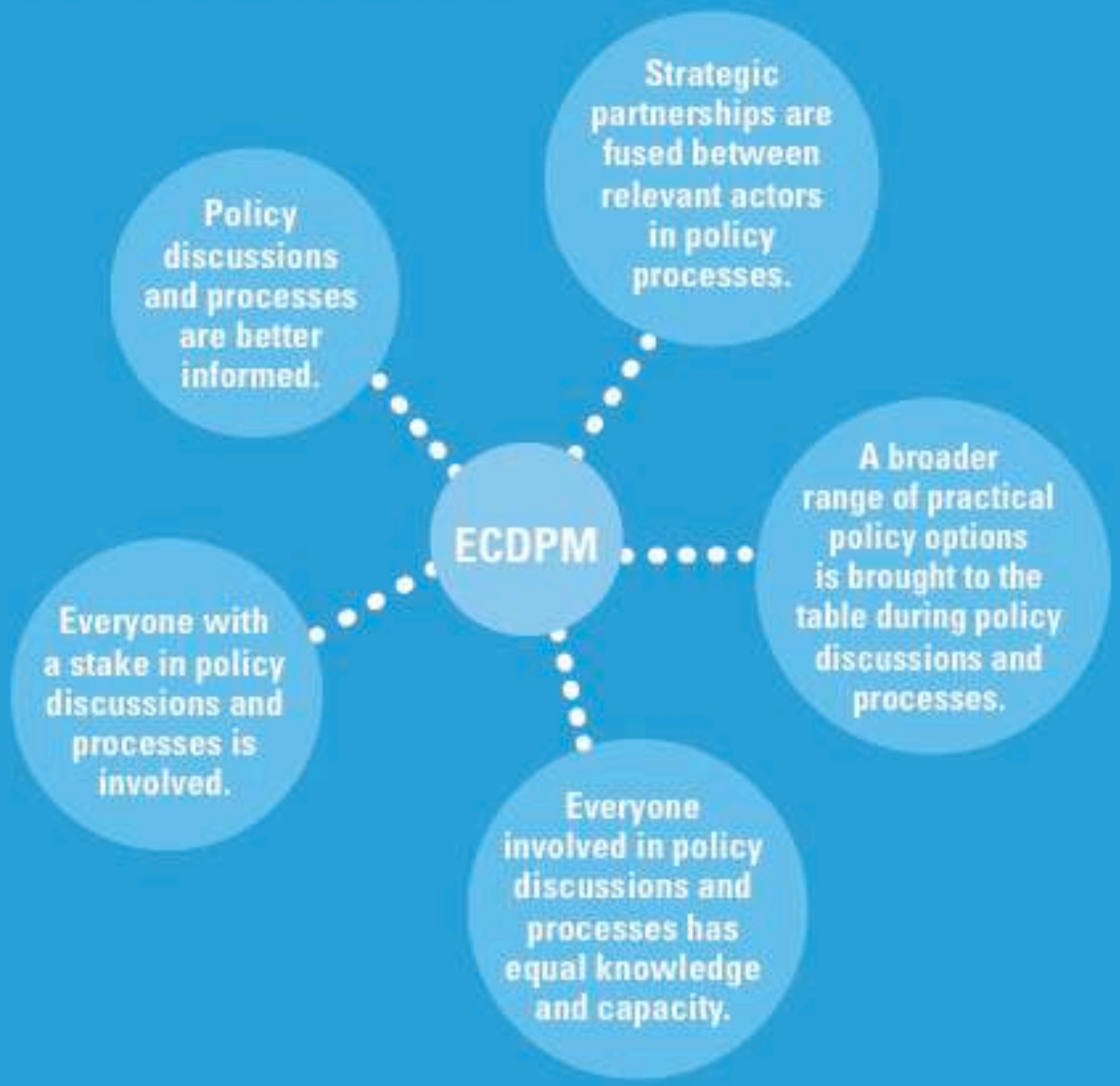
We undertake policy research and analysis.

We provide policy advice.

We bring people together.

ecdpm

RESULTS OF OUR WORK



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IMPACT OF OUR WORK IN THE LONG RUN

- Policies are more evidence-based, realistic and linked to practice.
- There is a smaller gap between policy aims, and their actual impacts on the ground.
- Policies from different countries, from different actors and in different domains work in harmony.
- Policies have a greater effect on food security, peace and security, economic transformation and governance.
- There is better overall cooperation between Europe and Africa, the Caribbean and the Pacific.

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OUR PARTNERS

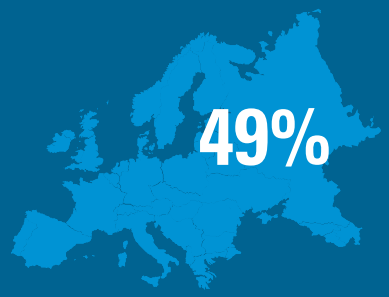
“No organisation or institution can bring about change alone. That’s why partnerships are the cornerstone of our work. Partners inspire new ideas. They enable systematic exchanges of experiences and best practices. Most importantly, combined efforts are more powerful than any individual, uncoordinated actions could ever be. ”

Geert Laporte
Deputy Director

ecdpm

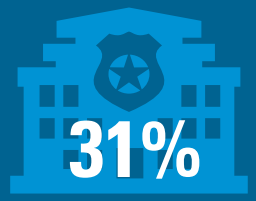
OUR OVERALL NETWORK

people from 17,351 organisations throughout the world

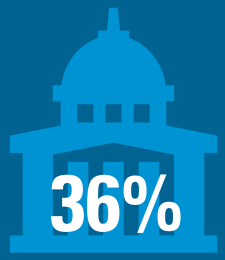


in Europe

in Africa
(an additional 6% in the Caribbean and the Pacific)

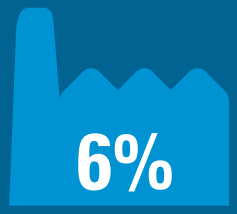


civil society



government

intergovernmental



private sector

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"Achieving those goals by 2030 will require coherent governance approaches at all levels. Beyond that, for sufficient impact on our planet and on the lives of those in need, full and swift implementation will be imperative – in developed and developing countries alike."

Ewald Wermuth
Director

www.ecdpm.org

Warming-up

Refugee crisis: 2016 on course to be deadliest year on record as thousands of asylum seekers drown in Mediterranean

'We're living in a shameful chapter for European history – we can't even treat people like humans'

Lizzie Dearden | @lizziedearden | Saturday 30 July 2016 22:45 BST |

DAKAR (Thomson Reuters Foundation) - The devastation wrought by Boko Haram, which has left millions of people in northeast Nigeria on the brink of famine, could exacerbate Europe's migration crisis if the world fails to act urgently, the country's chief humanitarian coordinator said.

'Only God can save us': Yemeni children starve as aid is held at border

Iona Craig reports from Yemen where aid agencies cannot get vital shipments into the war-torn country already gripped by cholera outbreak

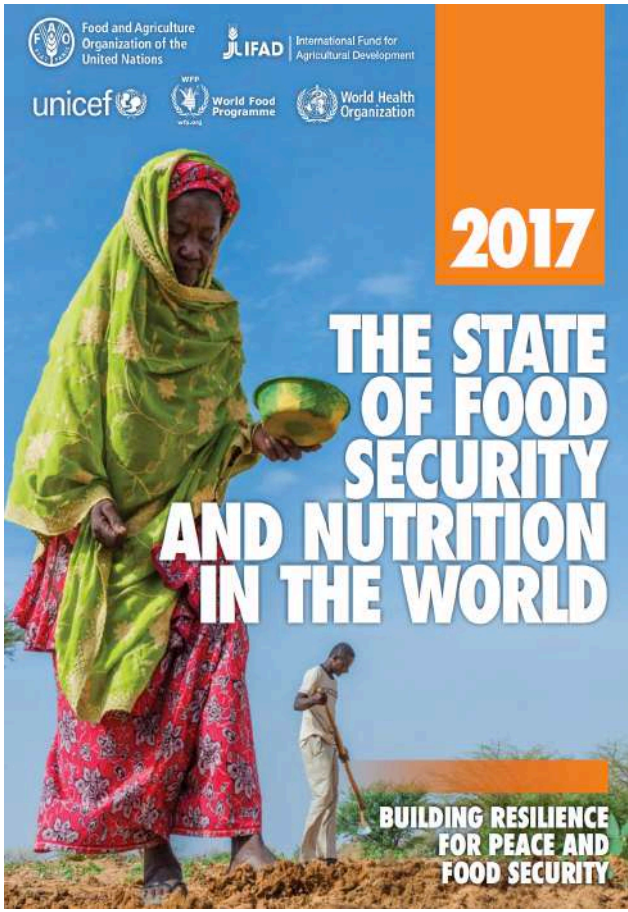
BEIRUT (Reuters) - An intensifying push by the Syrian government and allied forces to take the last major rebel stronghold near the capital Damascus killed at least 23 people on Sunday and injured many, the Syrian Observatory for Human Rights said.

The state of food insecurity 2017: sobering news for Africa & the world

- In 2016 the number of chronically undernourished people in the world is estimated to have increased to 815 million, up from 777 million in 2015 although still down from about 900 million in 2000.

- After a prolonged decline, this recent increase could signal a reversal of trends. The food security situation has worsened in particular in parts of sub-Saharan Africa, South-Eastern Asia and Western Asia, and deteriorations have been observed most notably in situations of conflict and conflict combined with droughts or floods.

- The apparent halt to declining hunger numbers is not yet reflected in the prevalence of child stunting, which continues to fall, though the pace of improvement is slower in some regions.



Source: FAO, SOFI 2017

2017: Conflicts and food insecurity

→ Multiple forms of malnutrition coexist, with countries experiencing simultaneously high rates of child undernutrition, anaemia among women, and adult obesity. Rising rates of overweight and obesity add to these concerns. Childhood overweight and obesity are increasing in most regions, and in all regions for adults. In 2016, 41 million children under five years of age were overweight.

→ The number of conflicts is also on the rise. Exacerbated by climate-related shocks, conflicts seriously affect food security and are a cause of much of the recent increase in food insecurity.

→ Conflict is a key driver of situations of severe food crisis and recently re-emerged famines, while hunger and undernutrition are significantly worse where conflicts are prolonged and institutional capacities weak.

→ Addressing food insecurity and malnutrition in conflict-affected situations cannot be "business as usual". It requires a conflict-sensitive approach that aligns actions for immediate humanitarian assistance, long-term development and sustaining peace.

Source: FAO, SOFI 2017

“If we have to intervene with humanitarian aid, it’s because development failed".

Monique Pariat (Director General, DG European Civil Protection and Humanitarian Aid Operations, European Commission) at CEPS Conference, Brussels, 2017

“Today, more than 20 million people in South Sudan, Somalia, Yemen, and north-east Nigeria are going hungry, and facing devastating levels of food insecurity. Famine is already a reality in parts of South Sudan. Unless we act now, it is only a matter of time until it affects other areas and other countries. We are facing a tragedy; we must avoid it becoming a catastrophe.”

“In our world of plenty there is no excuse for inaction or indifference”

Secretary General António Guterres of the United Nations, at a news conference in Feb. 2017, flanked by the heads of his aid agencies.

“The migrant crisis continues unabated. By better understanding the risks faced by these people, we can do more to protect them."

IOM spokesperson Leonard Doyle. Press release 2017.

"The biggest of all migration drivers is poverty"

Roberto Ridolfi (Director, DG International Cooperation and Development, European Commission) at CEPS Conference, Brussels, 2017

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The current situation

- Record numbers of people are displaced by disaster and conflict.
- Population increase and the impacts of climate change are intensifying the risk of wider humanitarian crises, such as food and water insecurity.

- The complexity of today's crisis situations brings humanitarian and development actors more and more on each other's turf:
- Protracted crises require longer humanitarian interventions
- At the same time, development cooperation is increasingly framed by a **resilience** narrative, be it in the Sustainable Development Goals or in the EU's ambitions to **address the root causes of vulnerability, fragility, conflict and migration.**

Addressing the root causes of vulnerability, fragility, conflict and migration:

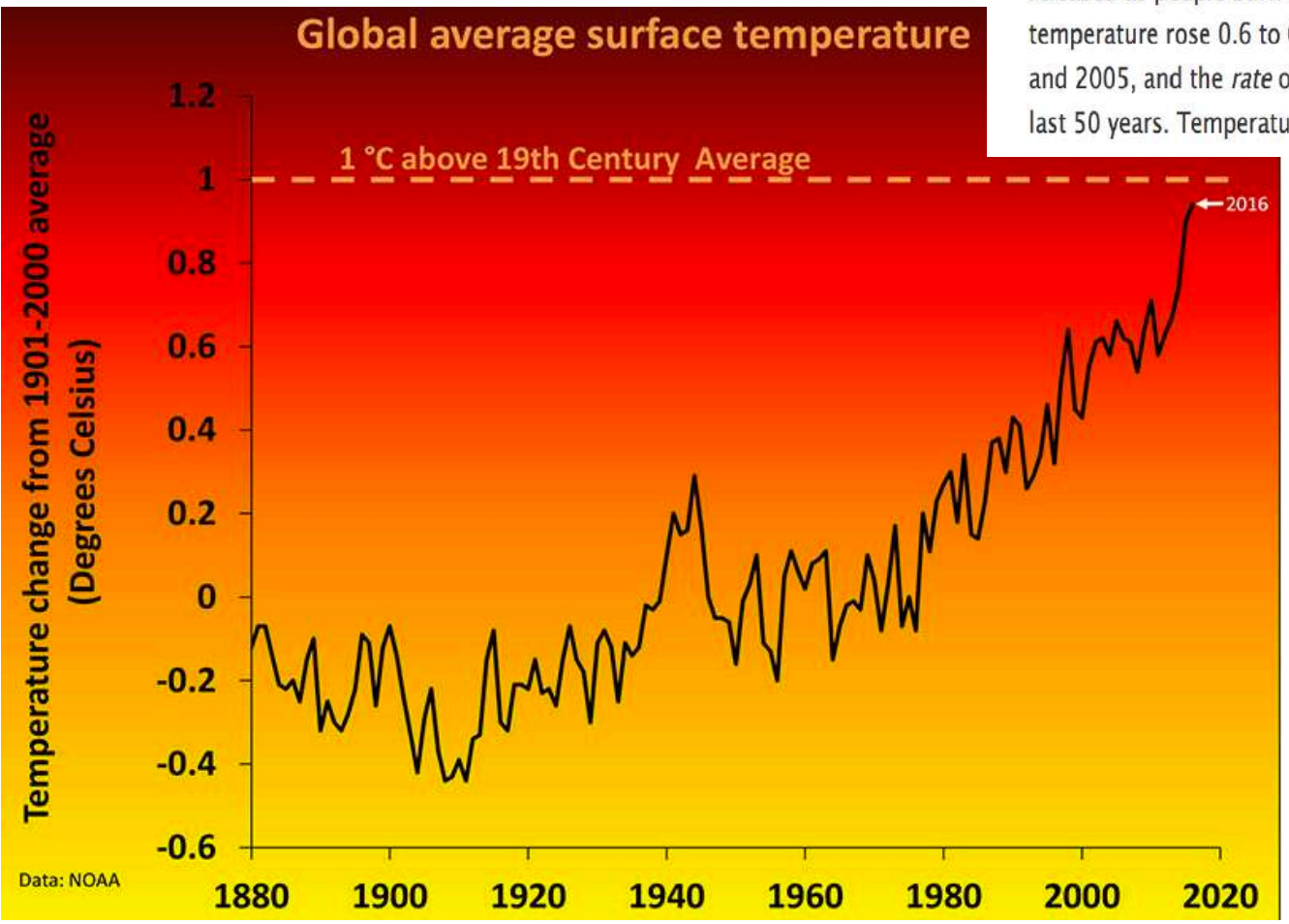
the FOOD SECURITY challenge

The climate-conflict-migration-food security nexus

Global warming

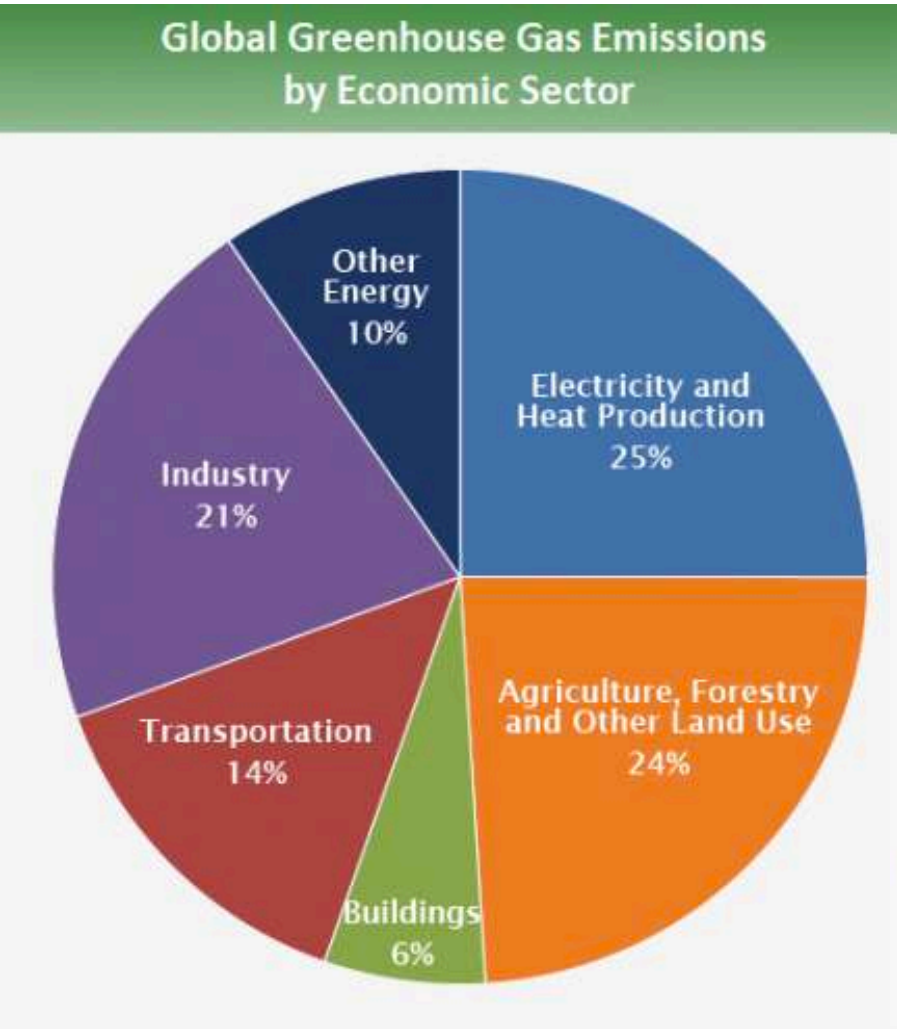
What is Global Warming?

Global warming is the unusually rapid increase in Earth's average surface temperature over the past century primarily due to the greenhouse gases released as people burn fossil fuels. The global average surface temperature rose 0.6 to 0.9 degrees Celsius (1.1 to 1.6° F) between 1906 and 2005, and the *rate* of temperature increase has nearly doubled in the last 50 years. Temperatures are certain to go up further.

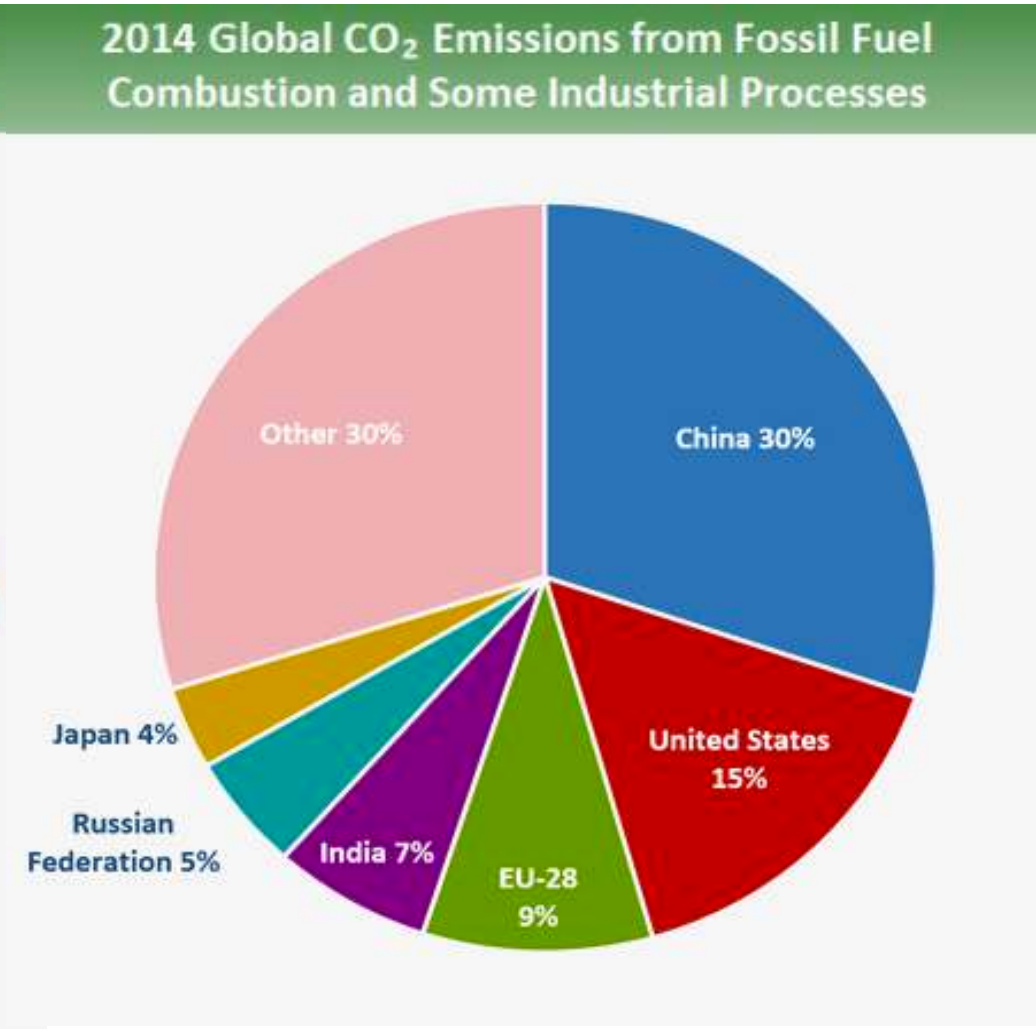


Source: Union of Concerned Scientists: http://www.ucsusa.org/

GHG by sector and by country

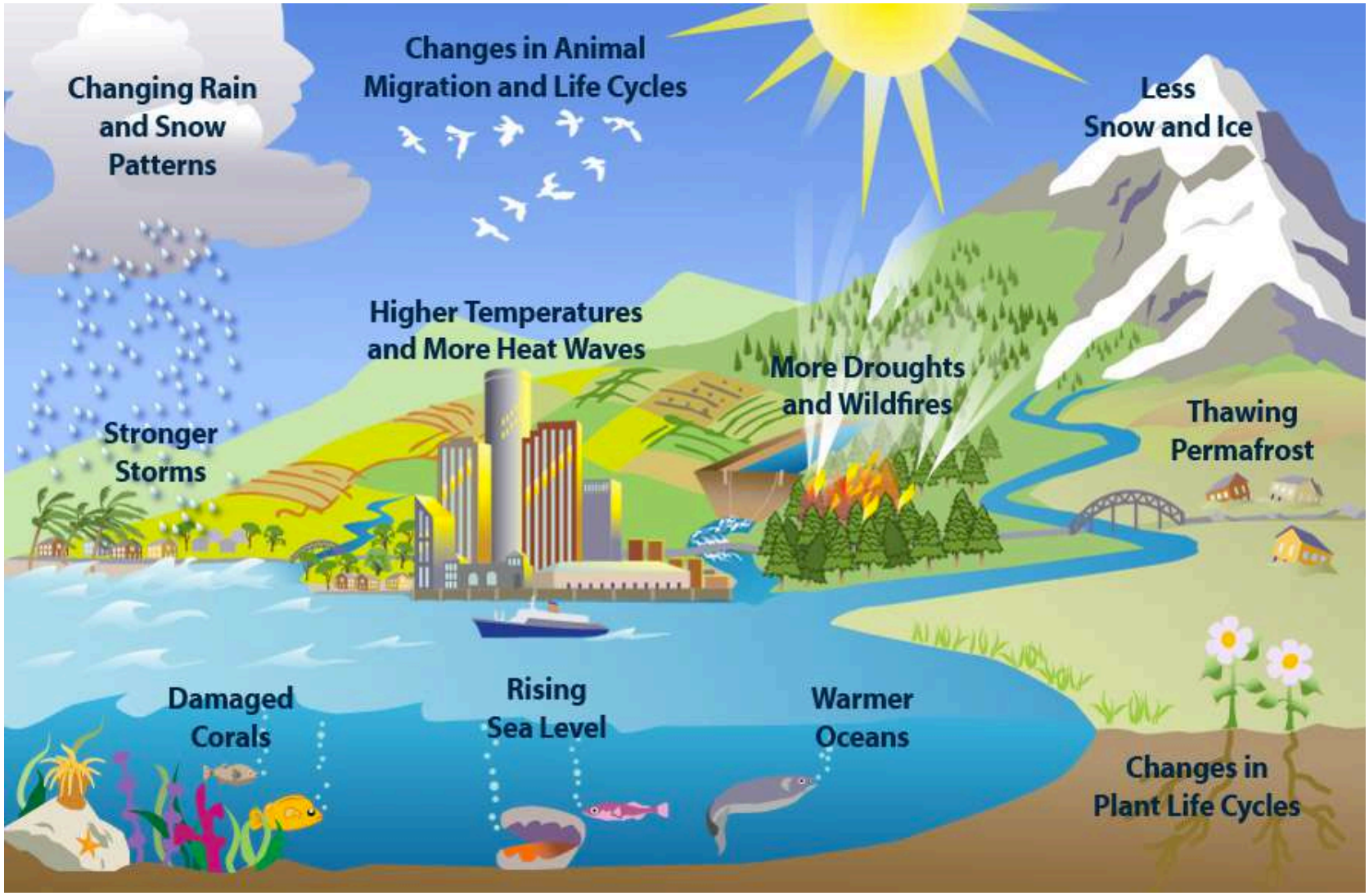


Source: IPCC (2014);



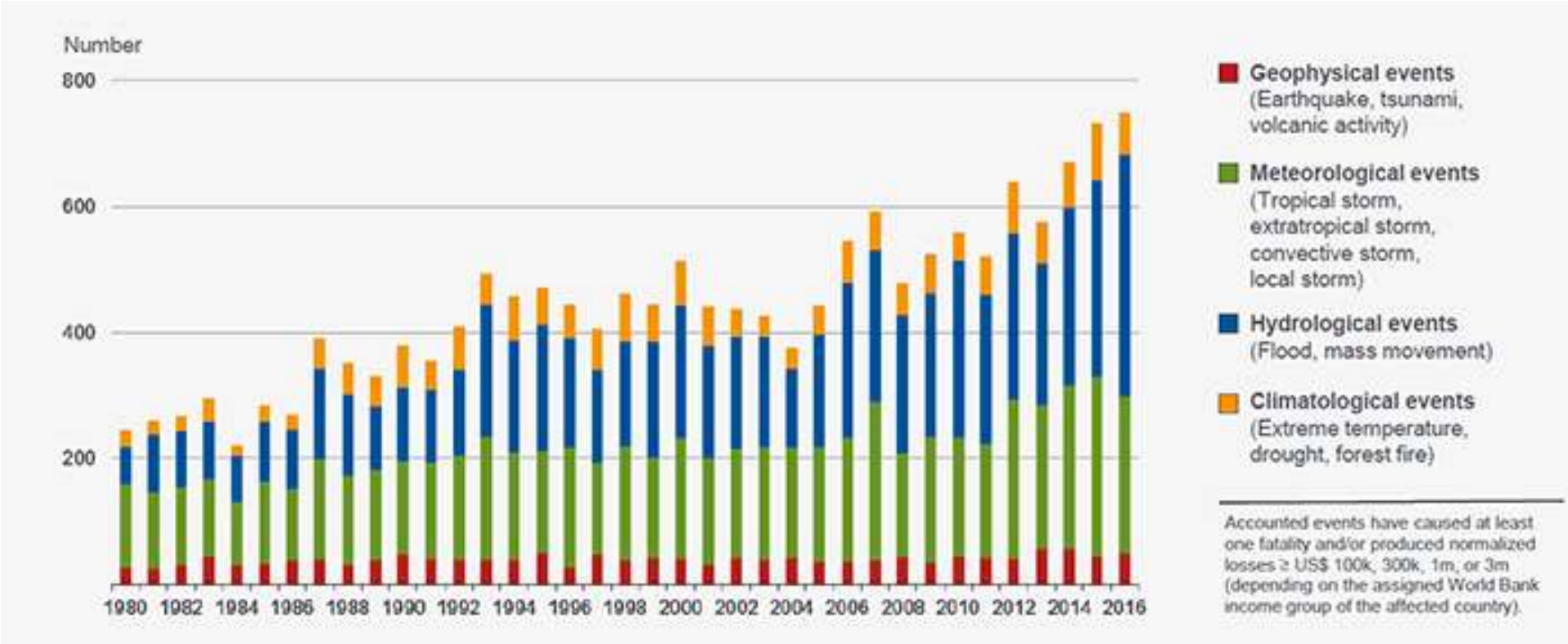
Source: Boden, T.A., Marland, G., and Andres, R.J. (2017)

Consequences of climate change



Source: EcoStinger: https://www.ecostinger.com/blog/climate-change/

Increased number of extreme events



Source: Climate Signals: http://www.climatesignals.org/resources/chart-increasing-flood-claims-changed-climate

Climate risks

Intensive climate risk

Sudden-onset, high-severity events (e.g. hurricanes, floods)

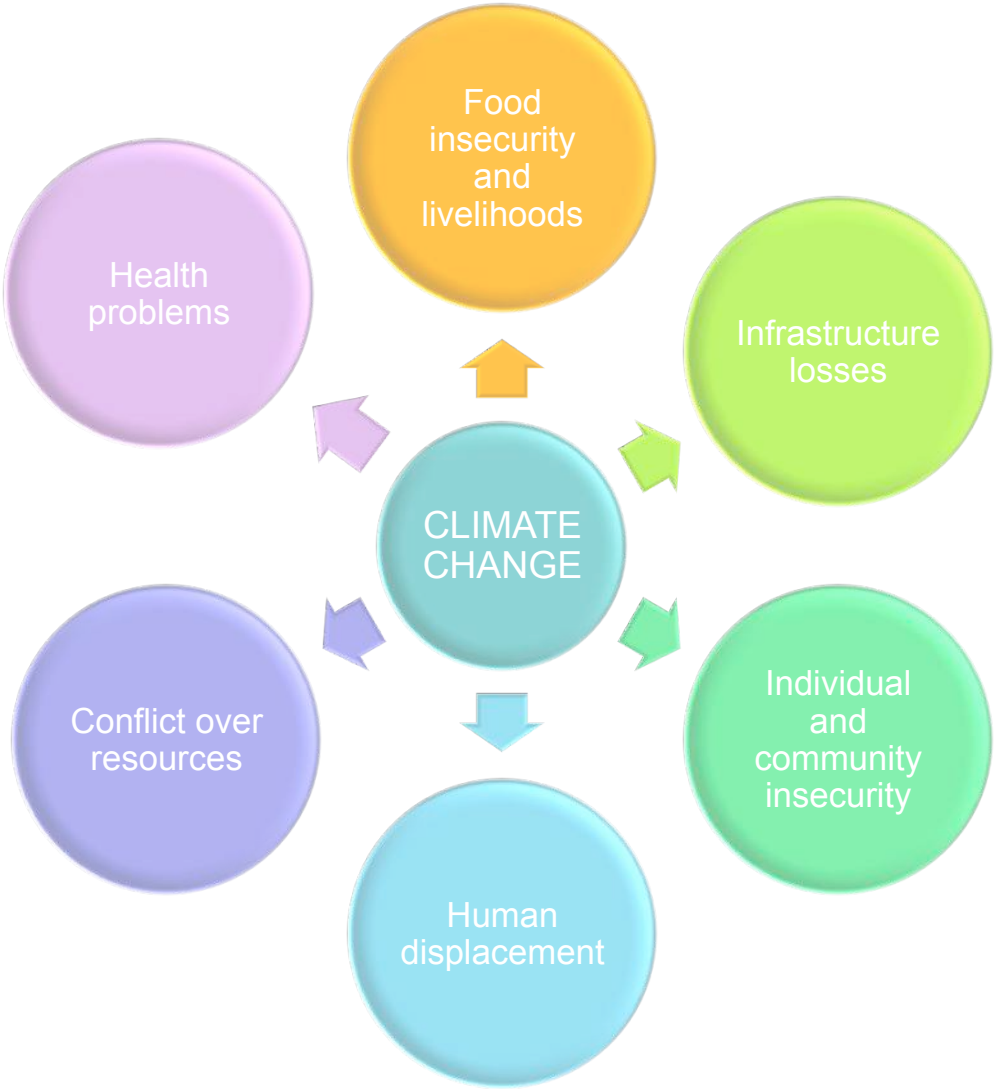
Myanmar 2015. Source: Al Jazeera

Extensive climate risk

Low severity, high frequency or persistent weather (e.g. droughts). Also: slow-onset, permanent environmental changes linked to climate change (e.g. salt water intrusion, desertification).

Philippines, 2016. Source: ibtimes.ph

How does climate change impact human security?

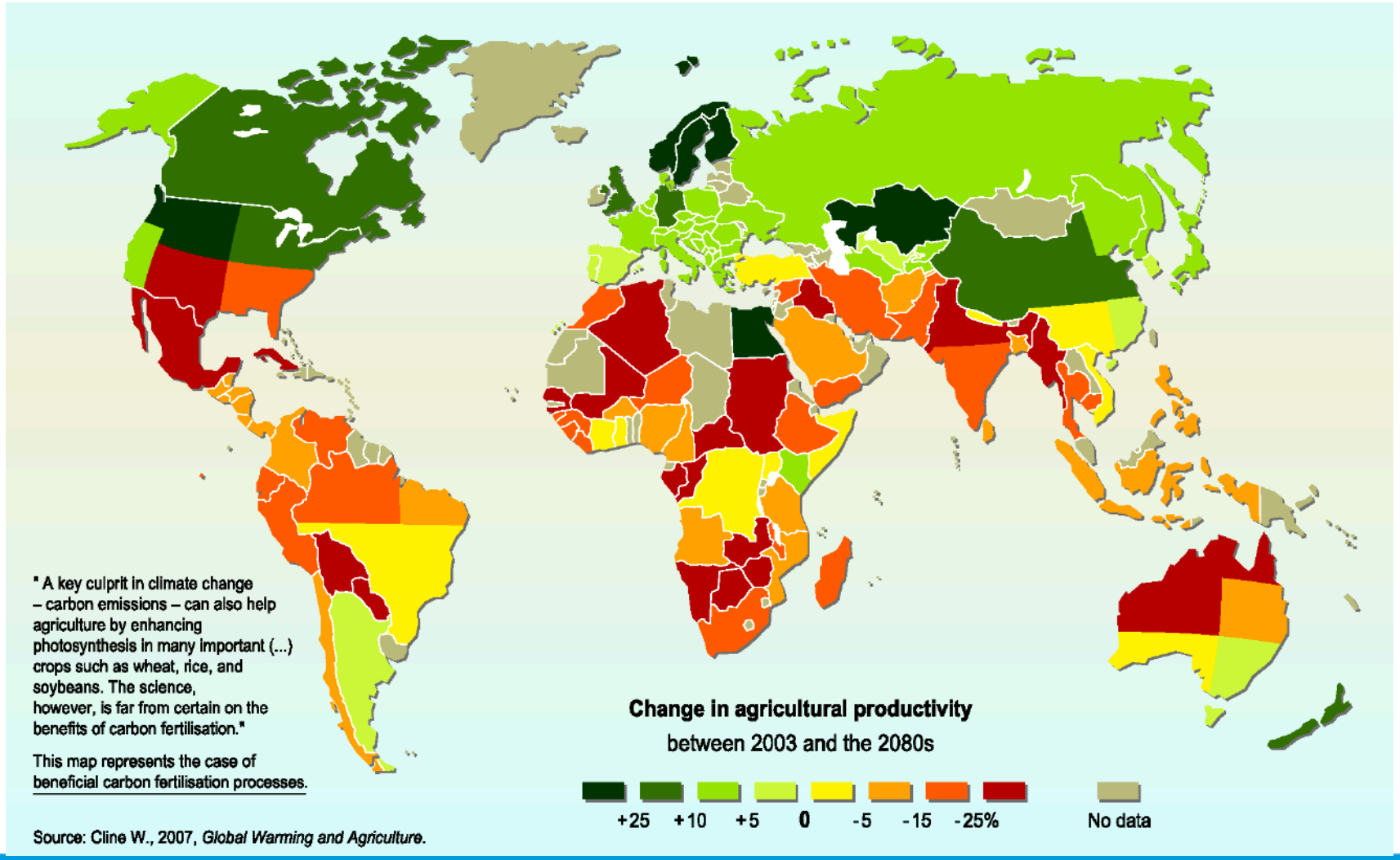


Climate change impacts on FOOD SECURITY

- Drought & desertification
- Decline in agricultural production
- Falling water levels in rivers
- Soil erosion
- Conflicts over resources

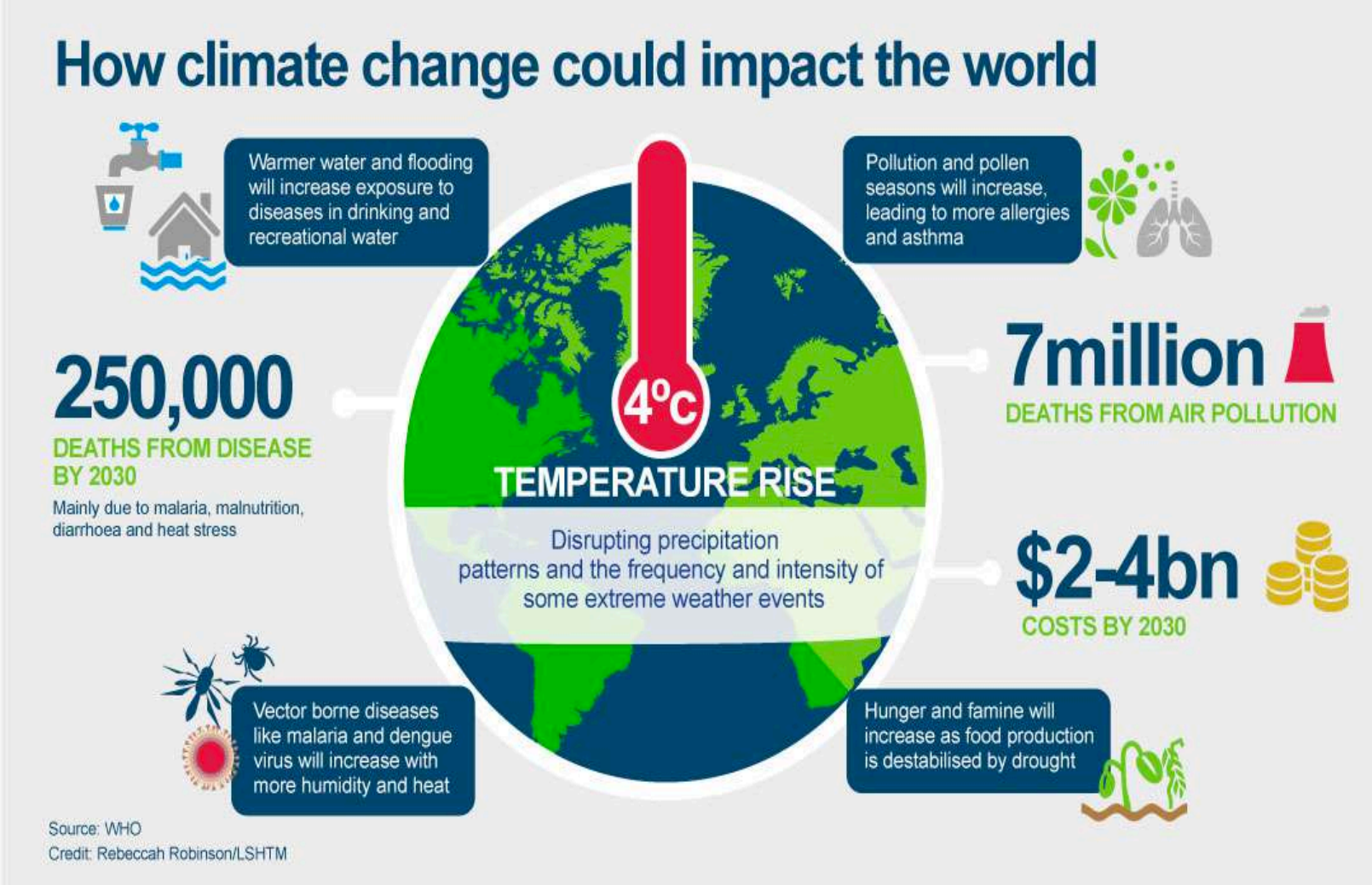
Consequences of climate change: FOOD INSECURITY

Projected impact of climate change on agricultural yields



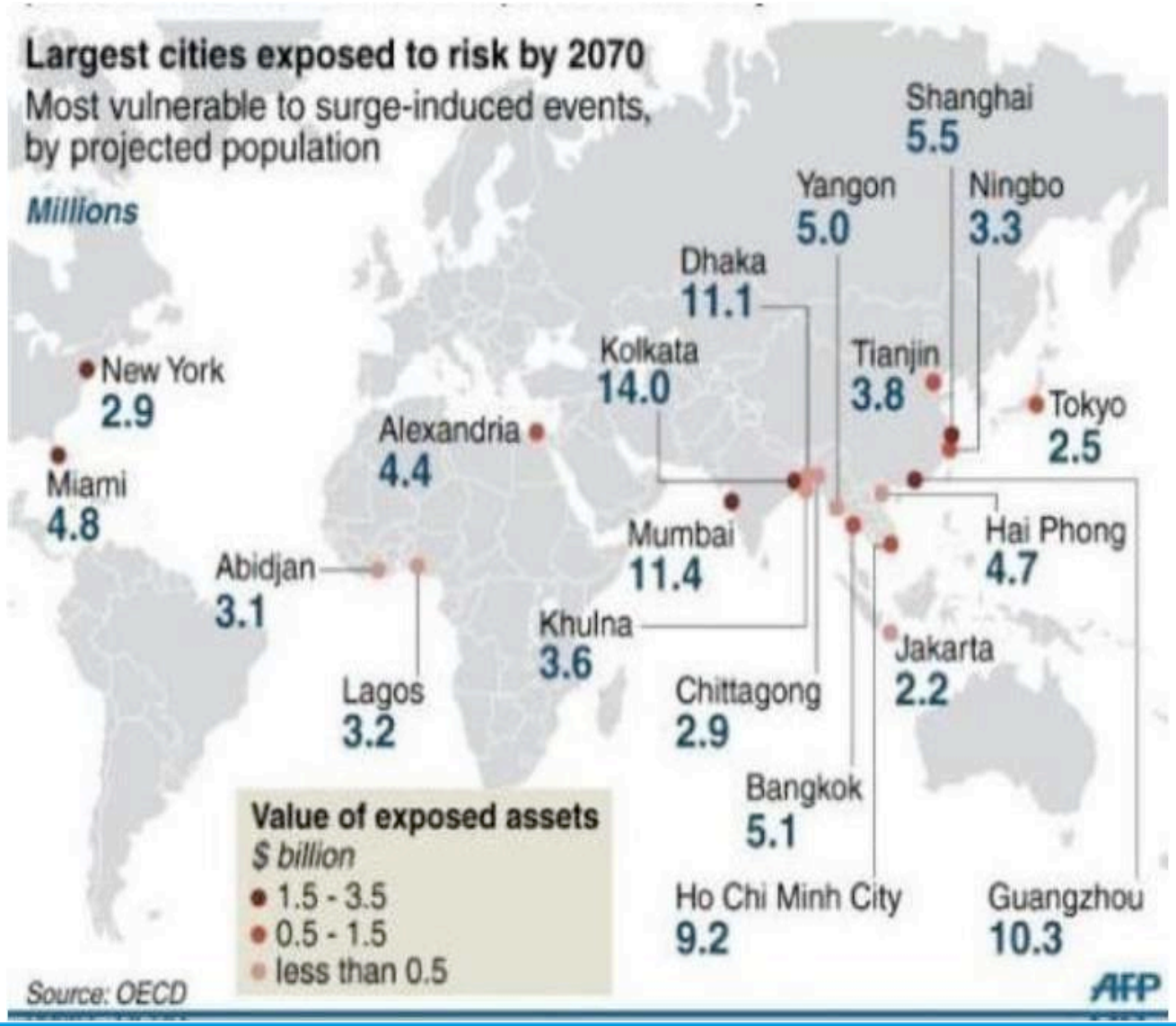
Climate change impacts on HEALTH

Climate change impacts on HEALTH



Climate change impact on INFRASTRUCTURE

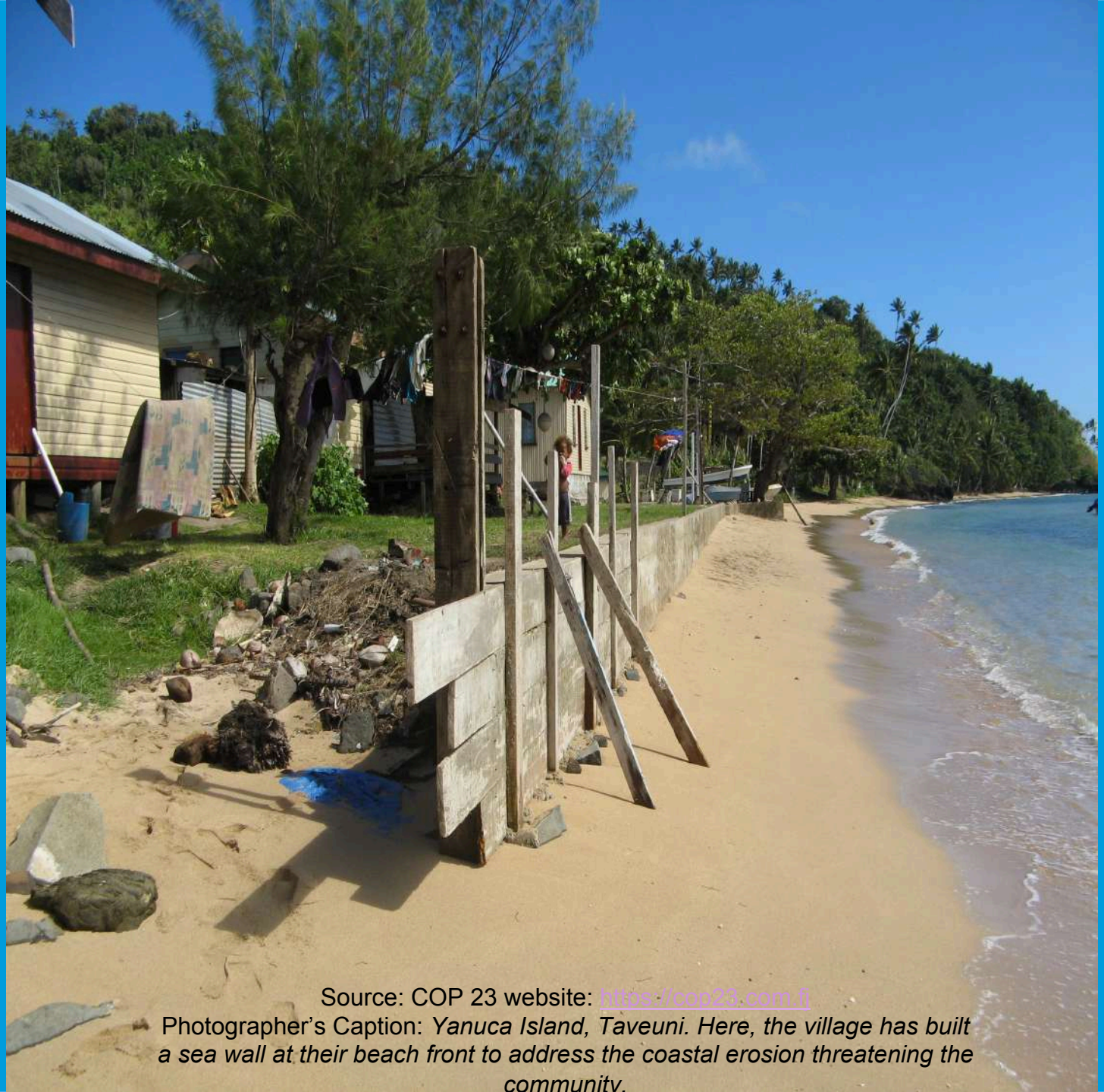
Rising waters threaten many big cities



Climate change impact on HUMAN DISPLACEMENT

Source: COP 23 website: https://cop23.com.fj

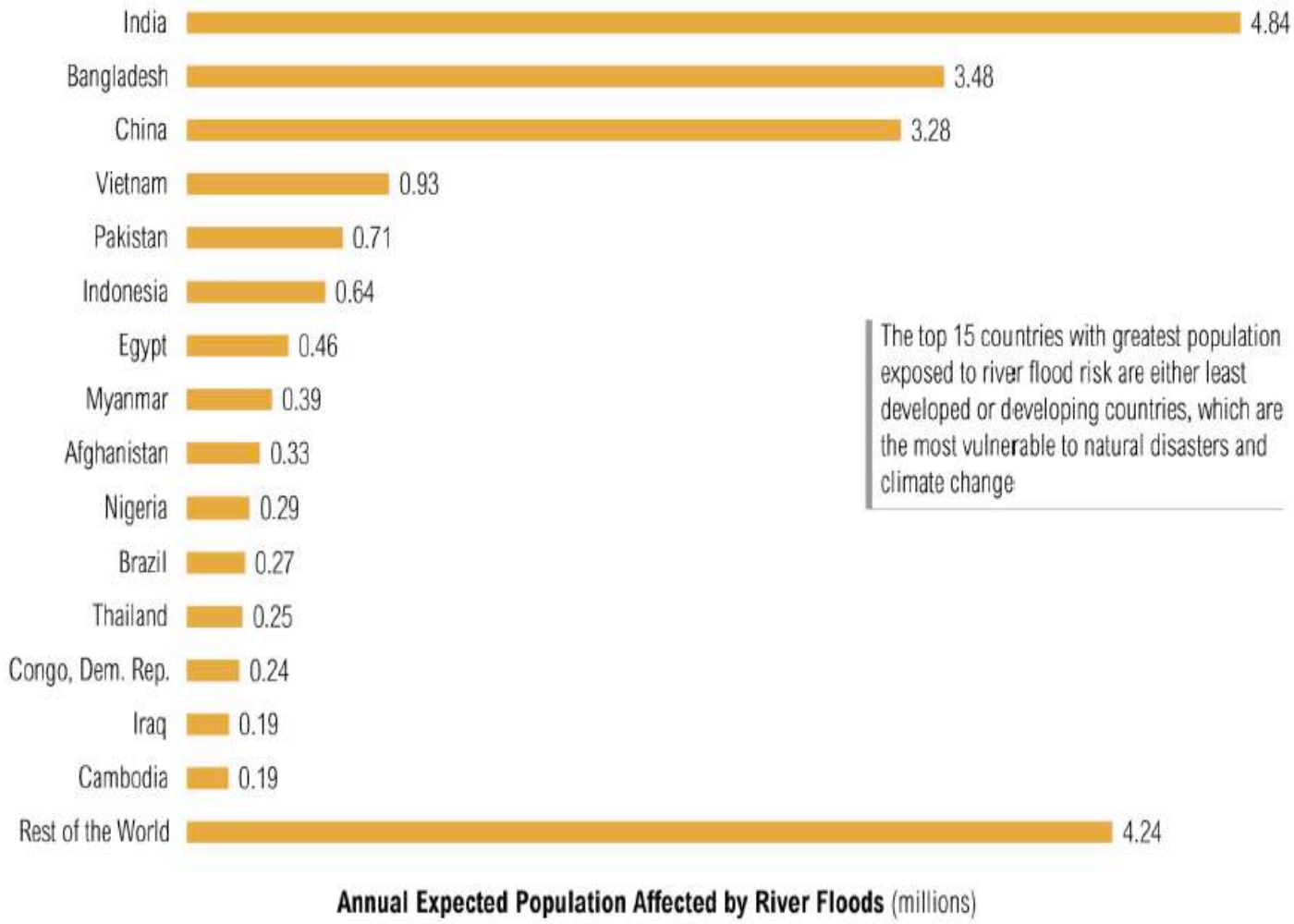
Photographer's Caption: "*In this picture, we see the impact of Cyclone Pam's initial waves on the Capital Island of Tarawa. Sandbag walls, constructed from reused rice bags and gathered sand are often the island's only defense against king tides, storms, and cyclones. To be honest I thought this is the end of my world. It's like watching a live movie. People running for their lives, BUT praise the Lord it's just a mini tsunami. Heaps of things destroyed, fortunately no one is harmed. Now, people are beginning to wonder how long they will be able to remain in their homeland.*"



Source: COP 23 website: https://cop23.com.fj
Photographer's Caption: *Yanuca Island, Taveuni. Here, the village has built a sea wall at their beach front to address the coastal erosion threatening the community.*

Population exposed to flood risk

15 countries account for 80% of population exposed to river flood risk worldwide



Source: WRI: www.wri.org/floods

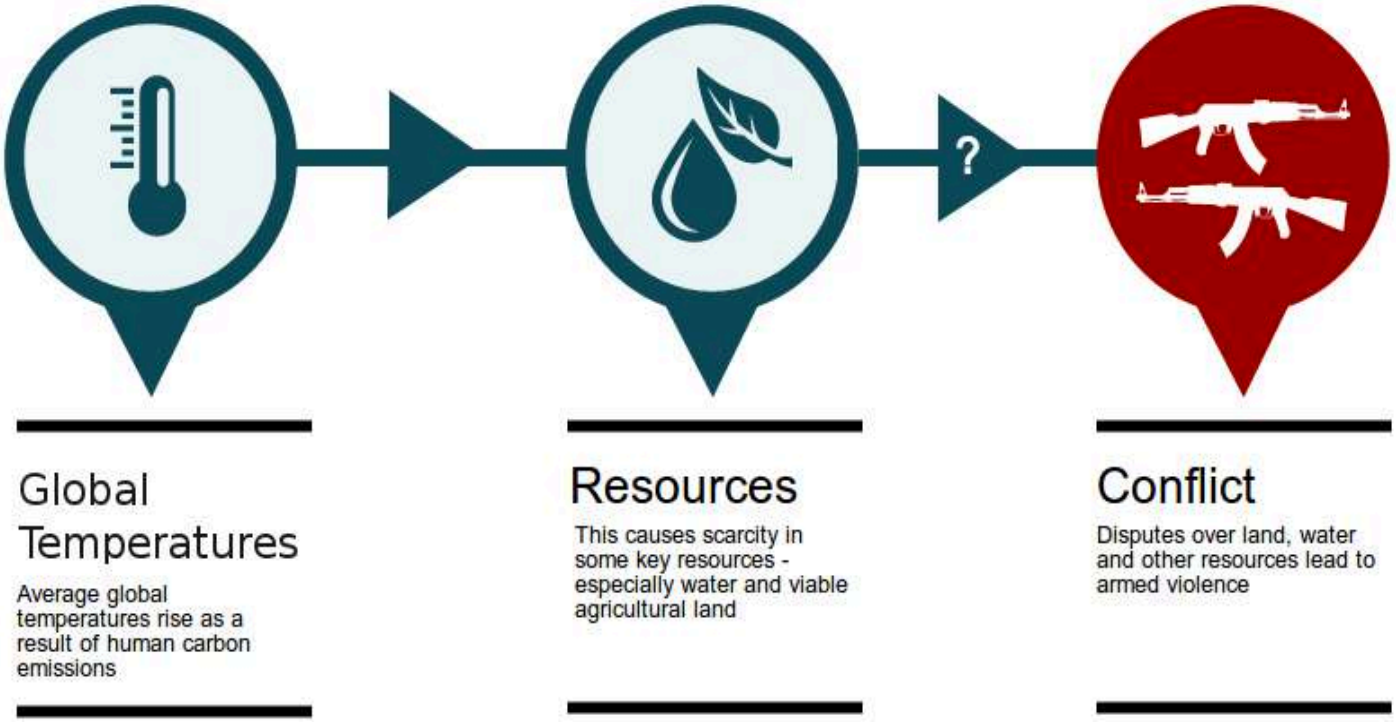
Climate change impact on HUMAN DISPLACEMENT

Climate change and CONFLICT

Source: http://climatetracker.org/

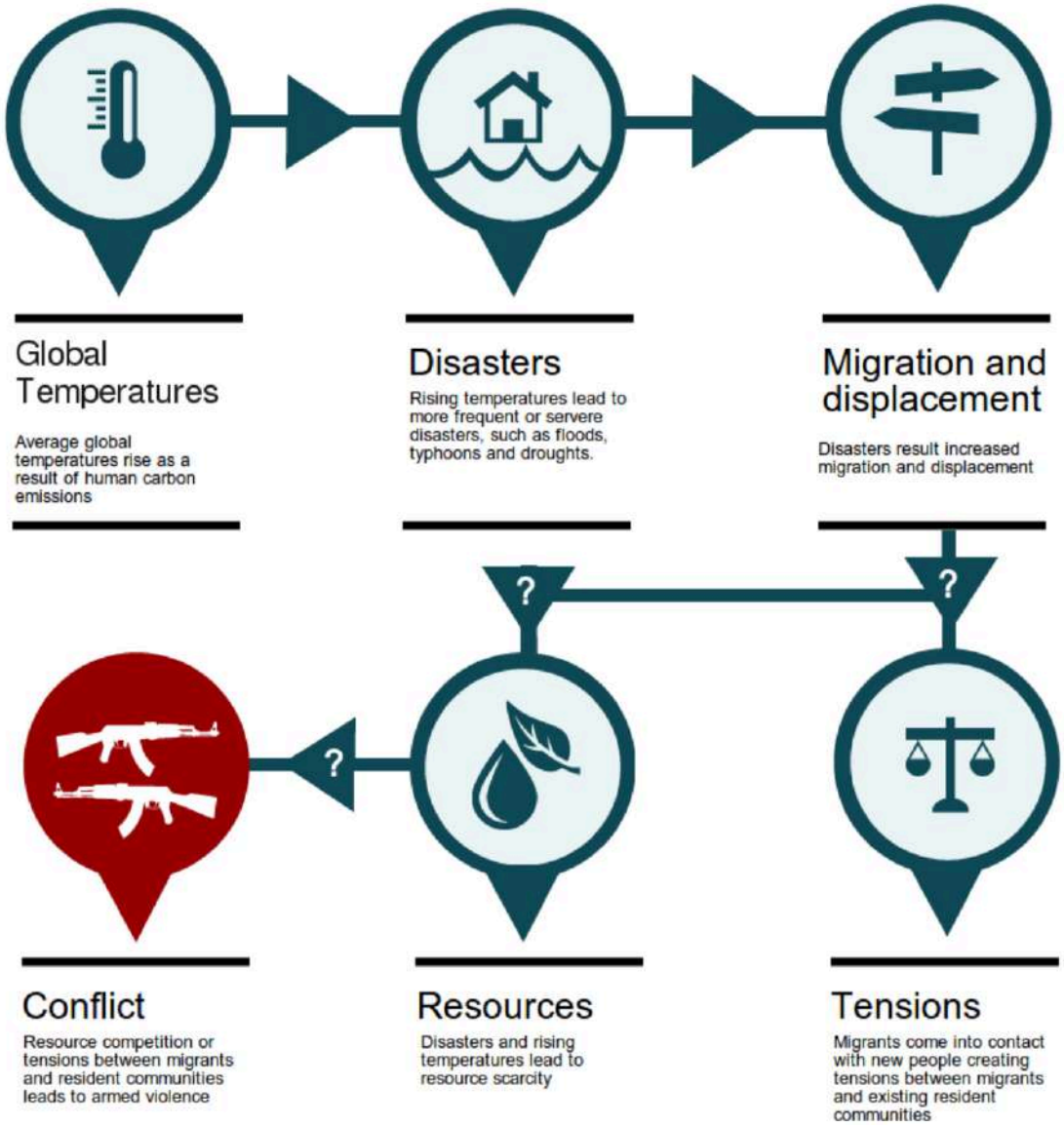
"I moved to the northern part of Kenya last year and for the duration that I have been here I have lost count of the number conflicts that I have heard or witnessed. Early this year, I was caught in the middle of a deadly clash at Leparua, along the border of Isiolo and Laikipia Counties that left three people dead and one person nursing serious injuries. The area is home to the traditionally pastoralist Samburu, Ndorobo, Turkana, Somali and Borana communities. The fight broke out after some morans from Samburu community had raided and stolen sixty heads of cattle from their Ndorobo neighbor.
What caught my attention, however, was the Isiolo Deputy County Commissioner's statement that conflict between the communities has 'escalated in the recent times'. The statement was echoed by my colleagues, acquaintances and friends. One study I looked at later on stated that, 'violent conflicts involving pastoralists have become widespread and increasingly severe in the North Rift and North Eastern regions of Kenya".

Theories on climate-induced pathways to CONFLICT



Source: Climate and Migration Coalition:
http://climatemigration.org.uk/infographic-exploring-evidence-for-the-climate-change-and-conflict-connection/

Theories on climate-induced pathways to CONFLICT



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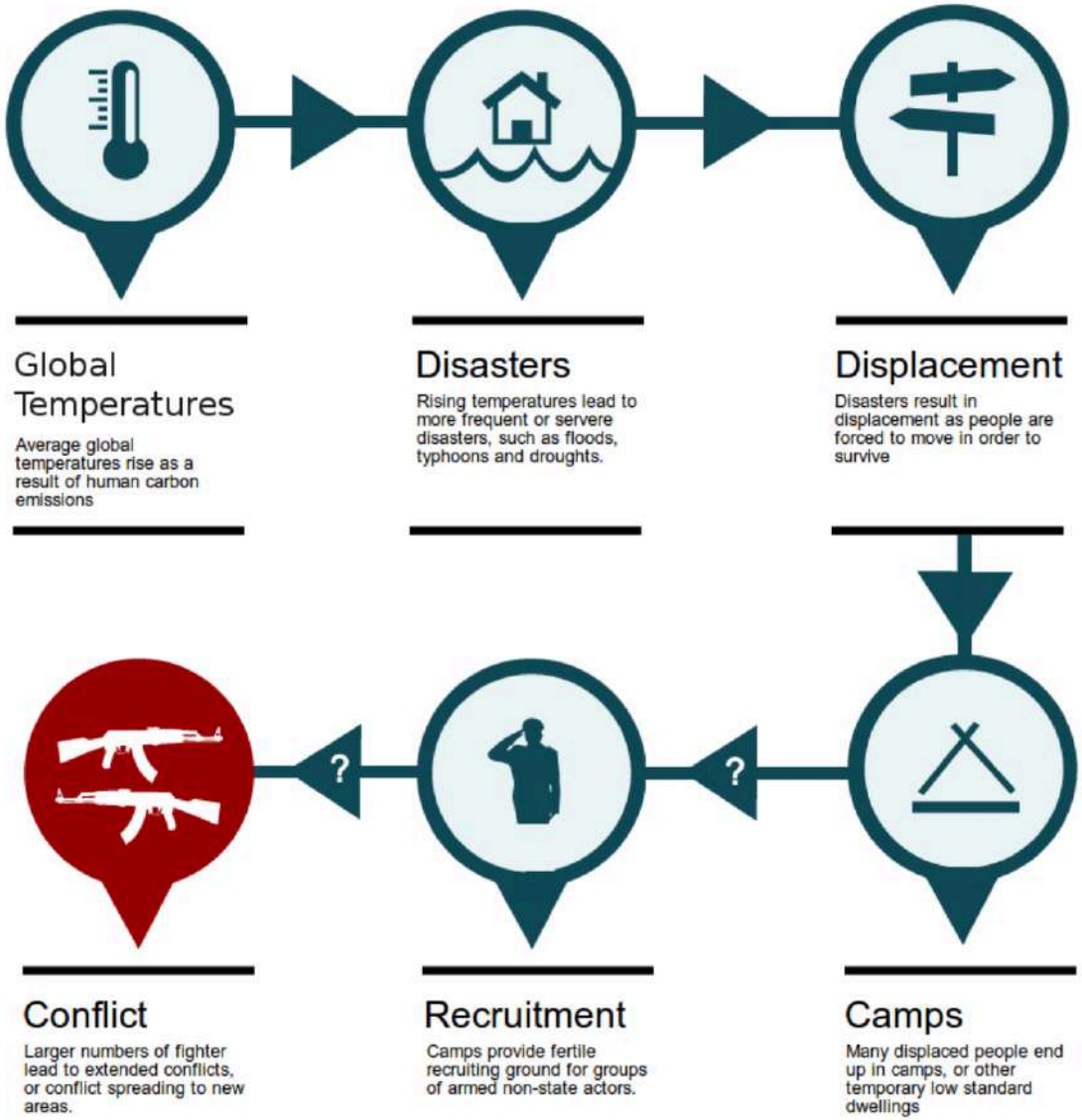
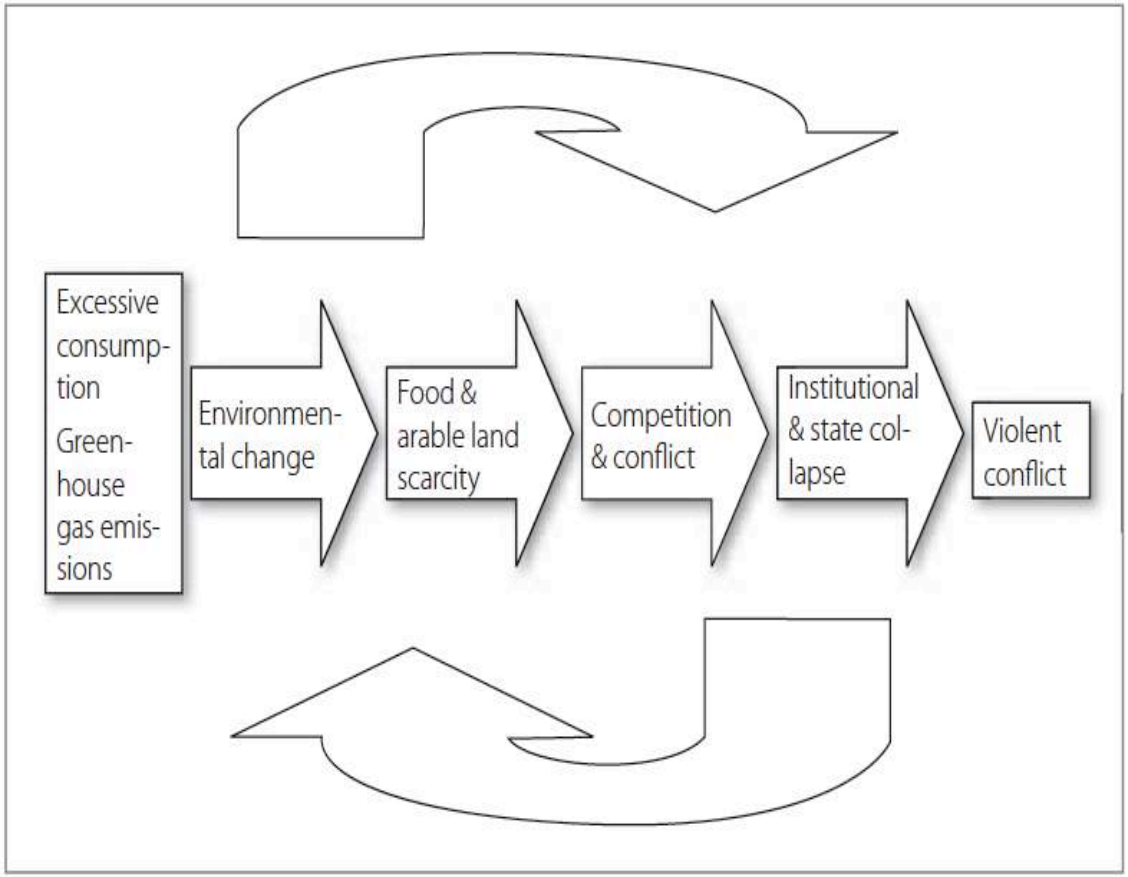
Theories on climate-induced pathways to CONFLICT



Source: Climate and Migration Coalition:
http://climatemigration.org.uk/infographic-exploring-evidence-for-the-climate-change-and-conflict-connection/

Theories on climate-induced pathways to CONFLICT

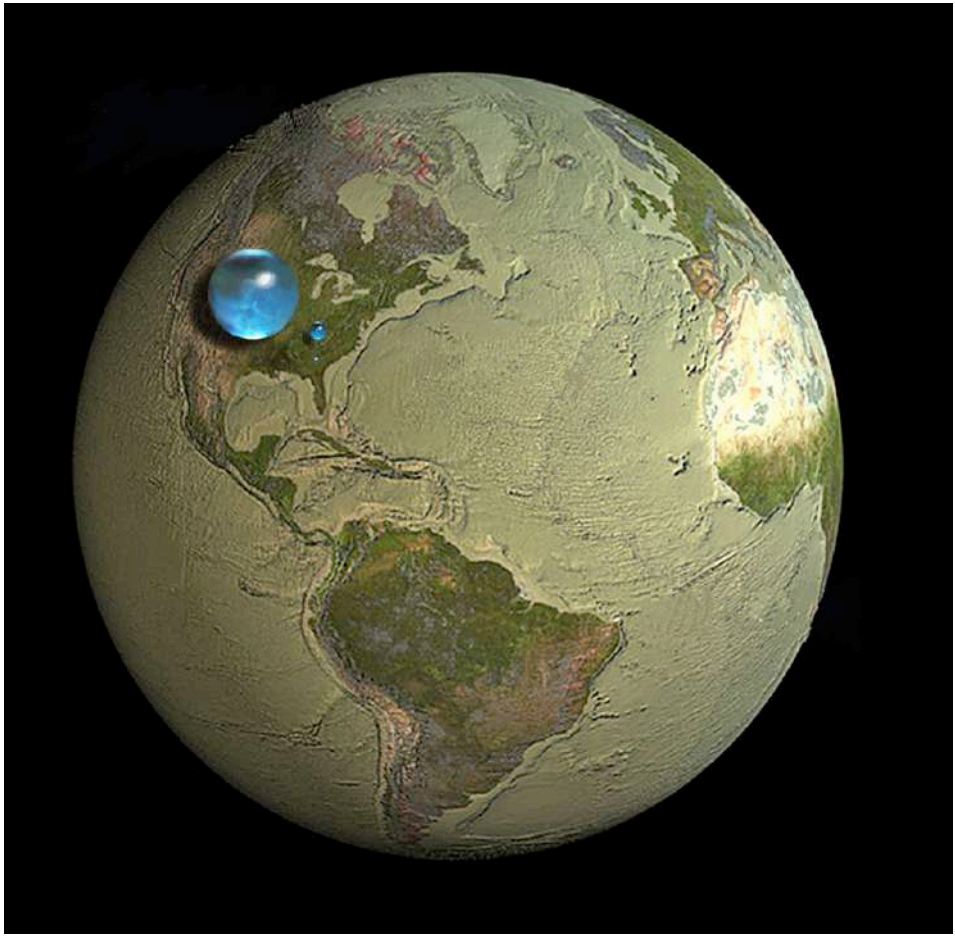
Figure 1 Simplified conceptualisation of the link between climate change, resource scarcity and resource conflict



Source Adapted from O Brown, A Hammill and R McLeman, Climate change as the 'new' security threat: implications for Africa, ***International Affairs*** 83(6) (2007), 1148

Climate-induced conflict: the water challenges

Water is scarce
to start with..

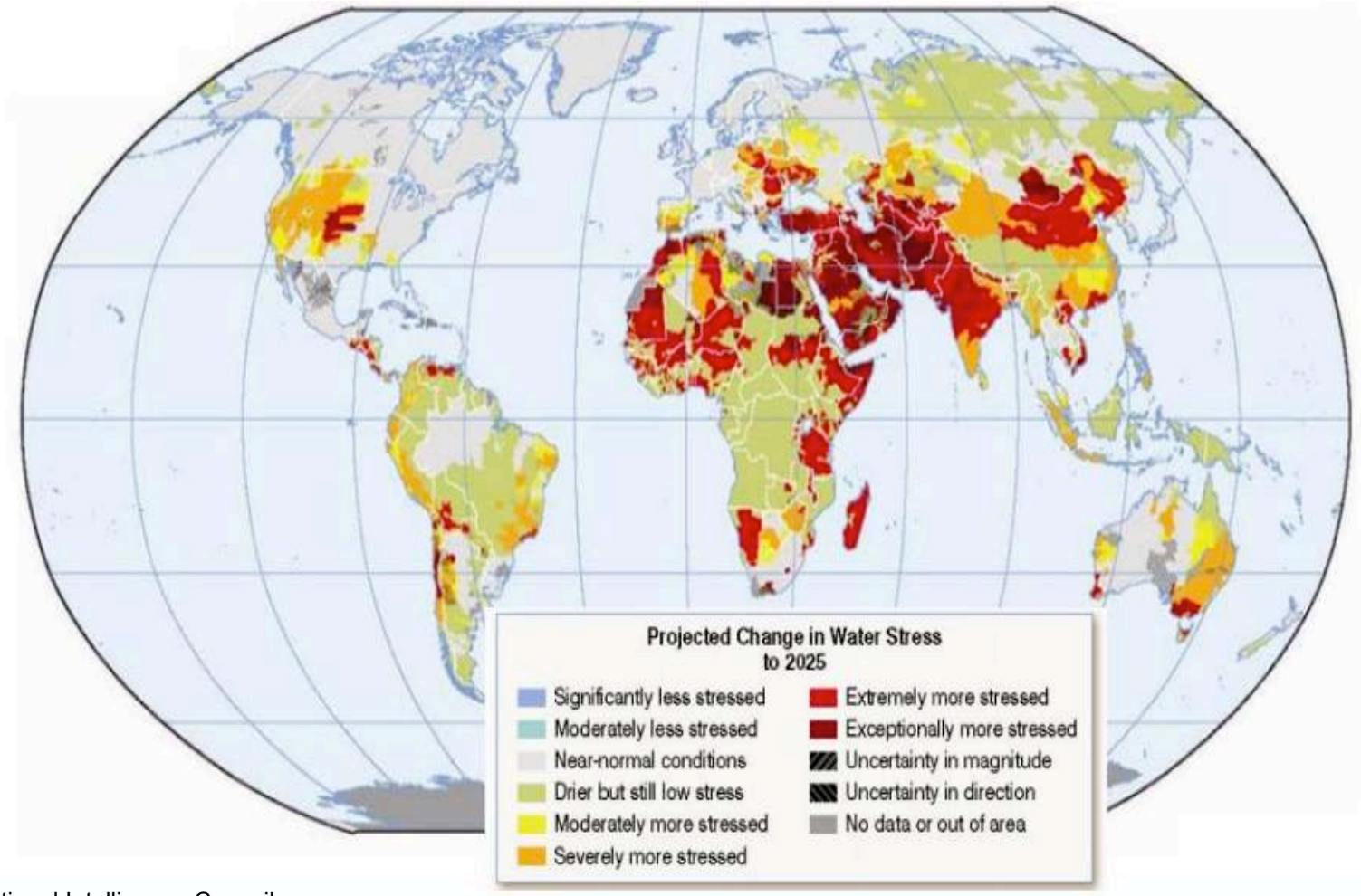


See the big blue bubble? That's the volume of total water on the planet (salt and fresh water), to scale. The second little blue ball is the total amount of fresh water on the planet. The tiny little blue spec under that one – that's the amount of fresh water currently accessible to humans.

Source: http://blogs.reuters.com/macroscope/2012/10/23/global-water-scarcity-in-one-stunning-visual-depiction/

Projected water stress

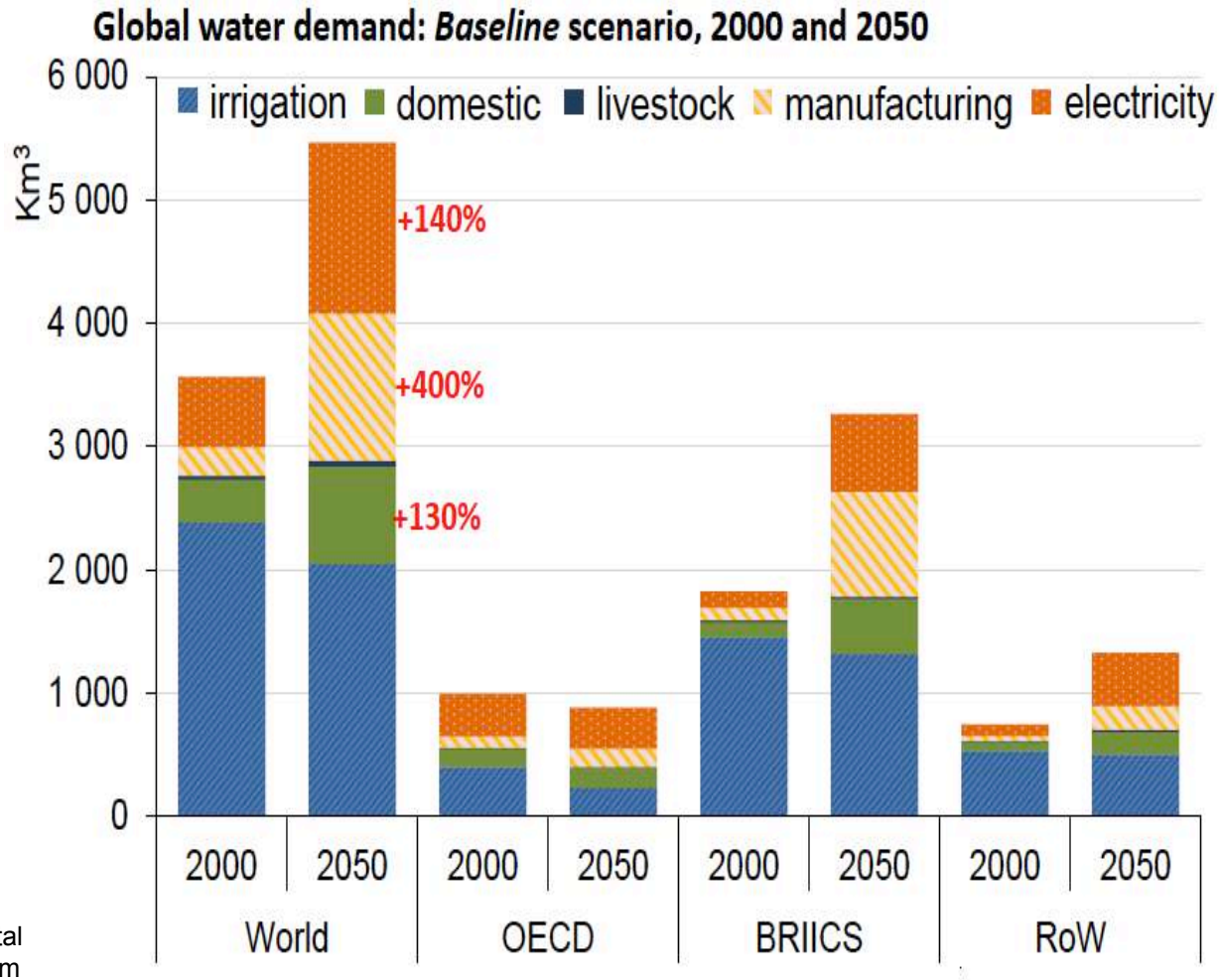
Global water picture (2025)



Source: US National Intelligence Council

Projected water demand

Environmental Outlook to 2050: WATER



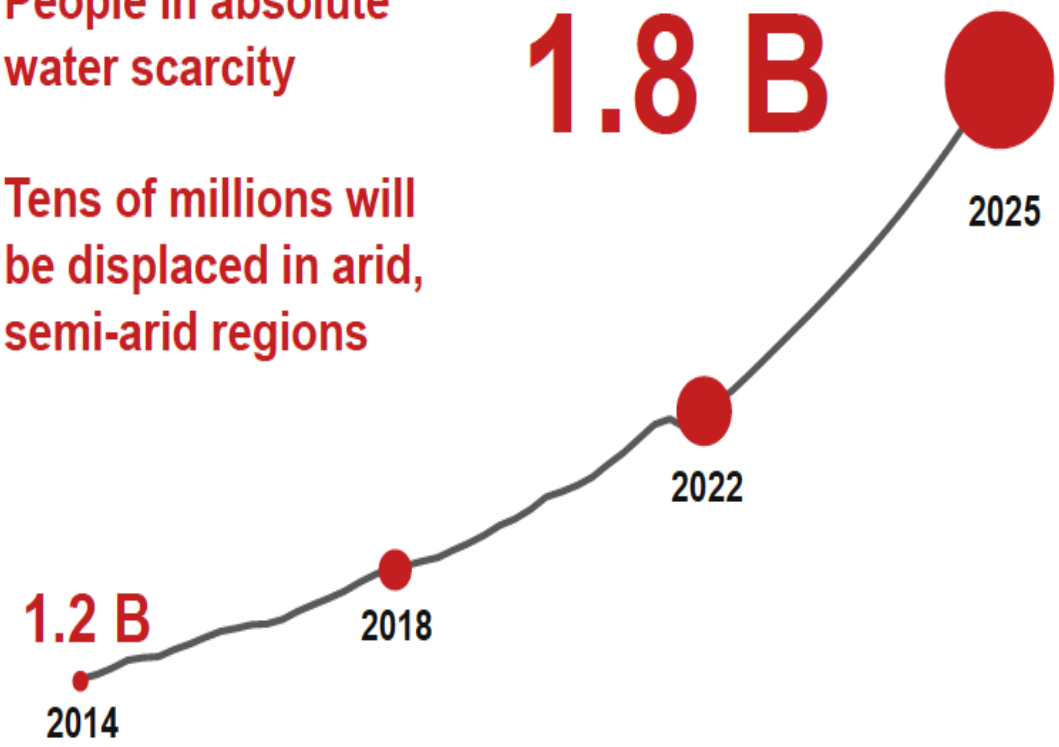
Source: OECD Environmental Outlook Baseline; output from IMAGE.

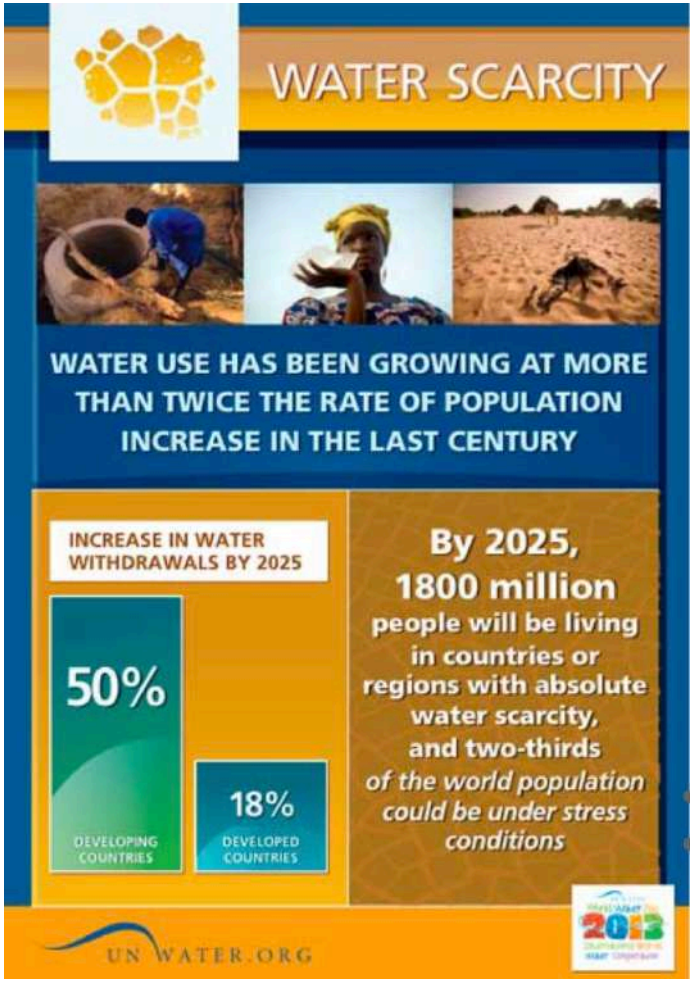
Water stress: projected people in water scarcity

Water stress will intensify

People in absolute water scarcity

Tens of millions will be displaced in arid, semi-arid regions

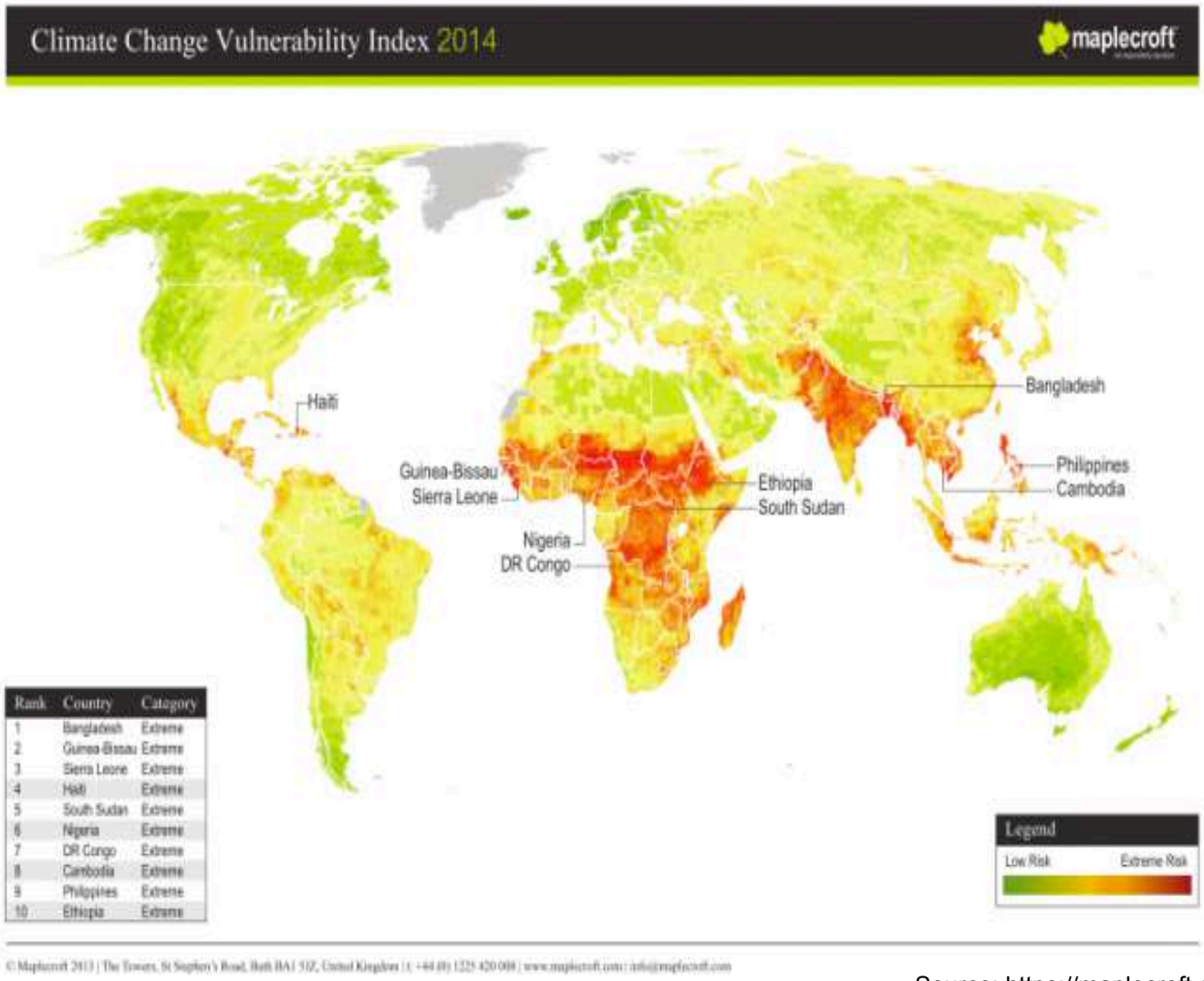




Source: UNwater.org

Climate change vulnerability-Climate-induced conflict

A worrying combination of climate change vulnerability and food insecurity amplifies risks of conflict and civil unrest in 32 countries



Rank	Country	Category
1	Bangladesh	Extreme
2	Guinea-Bissau	Extreme
3	Sierra Leone	Extreme
4	Haiti	Extreme
5	South Sudan	Extreme
6	Nigeria	Extreme
7	DR Congo	Extreme
8	Cambodia	Extreme
9	Philippines	Extreme
10	Ethiopia	Extreme

Source: https://maplecroft.com/

Climate-induced conflict case studies

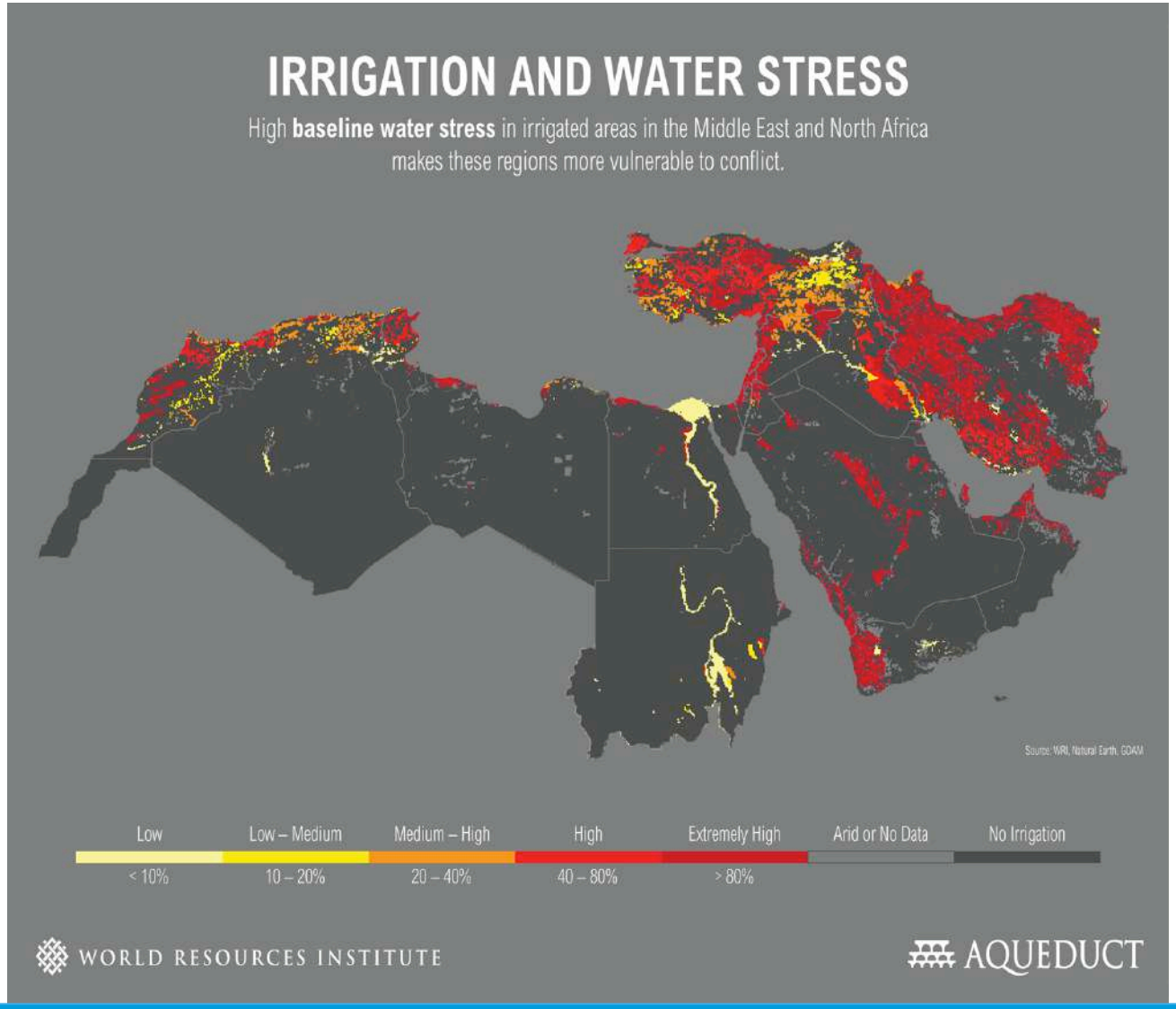
Image: Andrea Volpini, Creative Commons

Climate-induced conflict: Syria

Prior to 2011, droughts led to devastation of agricultural land on which at least 800 000 people depended. 85% of livestock died.
As a result, inhabitants of rural areas moved to Syria's larger cities to work (Homs, Daraa), becoming part of disparate communities. This contributed to outbreak conflict.

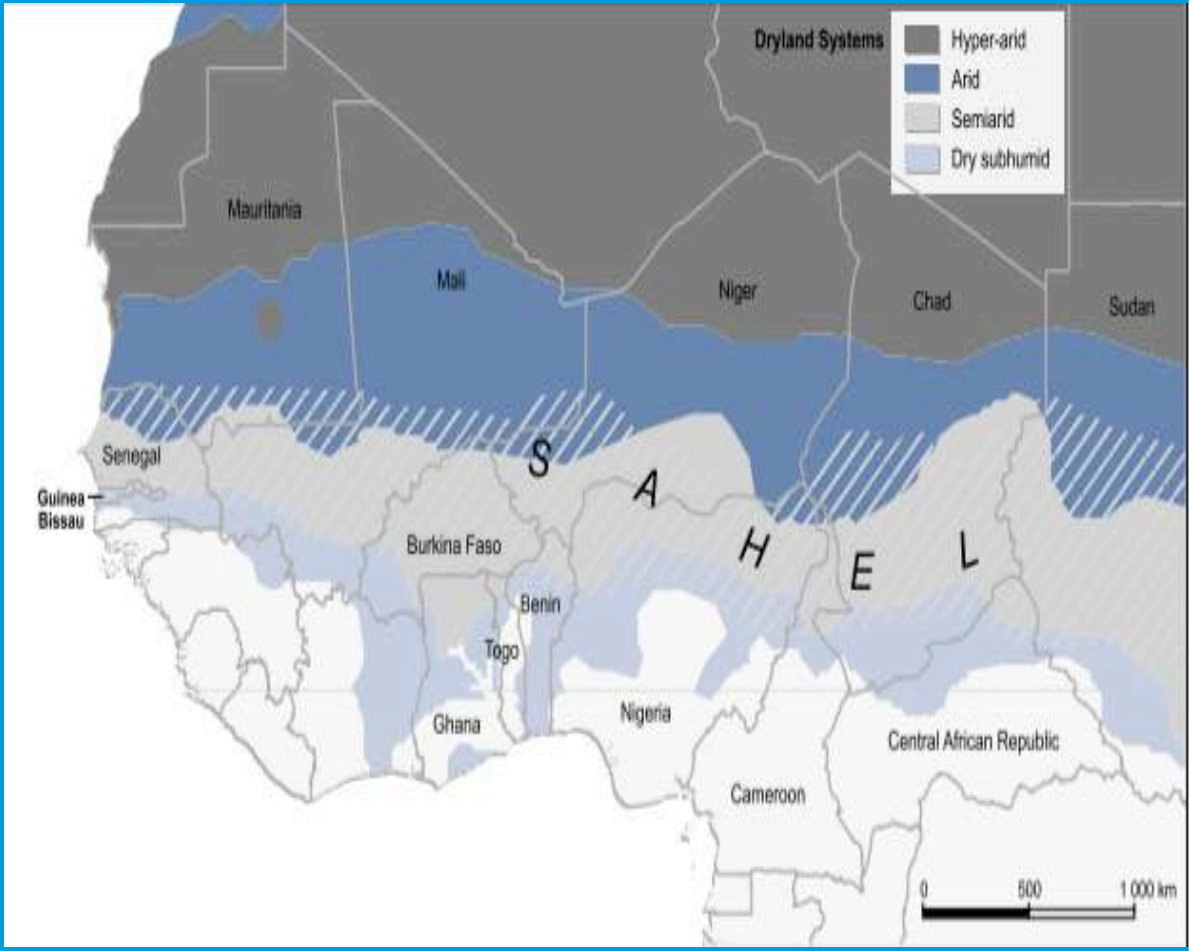
IS: control of dams in Iraq, Euphrates river & other waters in Syria.

Climate-induced conflict: Syria



Source: WRI

The Sahel


Dryland Systems
Hyper-arid
Arid
Semiarid
Dry subhumid
Mauritania
Mali
Niger
Chad
Sudan
Senegal
Guinea Bissau
Burkina Faso
Benin
Togo
Ghana
Nigeria
Cameroon
Central African Republic
S A H E L
0
500
1 000 km

Climate-induced conflict: West African Sahel

- Most conflicts: **natural resources-based**. Climate variability affects the distribution and availability of these resources.

- Predicted climatic changes driven by global climate change will also affect this variability in the future, potentially further exacerbating conflict.

- **Climate changes**: average rainfall in the region decreases steeply from south to north, ranging from 1,000 mm/year in the south to 150 mm/year in the northern fringes. The short single wet season lasts for about 3-4 months. Over the last century, droughts have significantly increased in magnitude and intensity, and annual rainfall levels have decreased.

- Result: the **decreasing rainfall has also pushed northern pastoralists to migrate southward** into lands occupied by sedentary farmers, causing conflicts and the widespread destruction of farmlands and cattle, with adverse implications for the region's food and human security.

Climate-induced conflict: West African Sahel

- Vulnerability in the West African Sahel is not only caused by climate variability or change. Social, economic, and political factors interact with climate to cause vulnerability. The region is characterized by **high population growth** (about 3.1%) and **rapid urbanization** (estimated at about 7%). The rate of food production can barely keep up: intensifying and expanding agriculture has only marginally increased food production. The fallow system that was traditionally used to preserve soil fertility has almost disappeared; farmers in some areas now cultivate their land year-round, and with low fertilization, the soil quickly loses its productivity and yields decline.
- Only 8% of the land area in the West African Sahel is suitable for farming, and irrigated agriculture currently occupies about 5% of this land.
- Result: **farmers are expanding into marginal lands traditionally used by pastoralists + pastoralists are moving further south in search of water and pastures,** heightening competition between livestock and agricultural production.
- In addition: the Sahel is also a zone of **cultural transition**, where the Islamic culture from the north mingles with the traditional cultures of the south.

Climate-induced conflict: West African Sahel

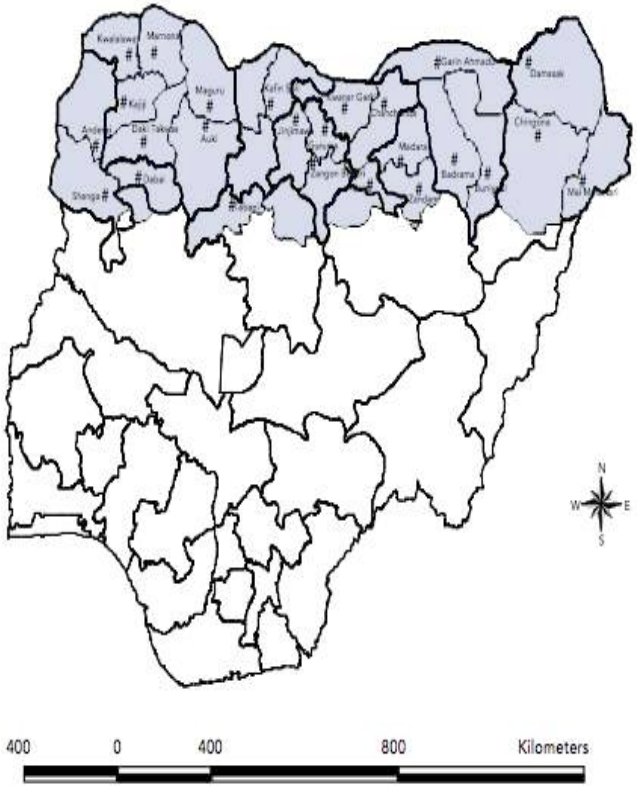
Semi-arid dry land in Sahelian northern Nigeria (© Anthony Nyong)

Wilson Center, 2012.

Climate-induced conflict: West African Sahel

Case-study: Hadejia-Nguru Wetlands, northeastern Nigeria
https://www.wilsoncenter.org/sites/default/files/Nyong12.pdf

Hadejia-Nguru Wetlands in northeastern Nigeria (© Anthony Nyong)



Wilson Center, 2012.

Climate-induced conflict: West African Sahel

Reasons of vulnerability

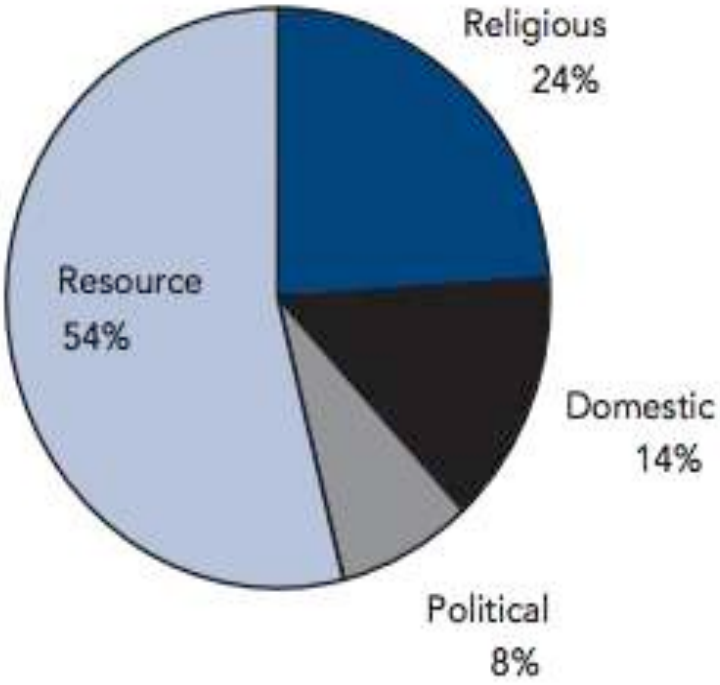
No	Perceived Risk	Percentage (%)
1	Insufficient food for people	58.2
2	Shortage of water for domestic use	50.9
3	Shortage of water for animals	50.3
4	Shortage of crops for cultivation	48.4
5	Animal diseases	42.5
6	Insufficient pasture for animals	36.6
7	Limited land for cultivation	34.6
8	Crop failure	26.8
9	Conflicts/insecurity	22.2
10	Human diseases	20.9
11	Low prices for animals	13.7
12	Lack of employment	12.4

Note: Households listed more than one risk.

Wilson Center, 2012.

Climate-induced conflict: West African Sahel

The study identified 4 major causes of conflict



Wilson Center, 2012.

Climate-induced conflict: West African Sahel

- Hadejia-Nguru Wetlands in northeastern Nigeria: a seasonally flooded riverine plain
- Home to about 1 million people, the **wetlands are of great economic importance to the region** and many communities depend on them for their livelihoods.
- A less productive arid area next to the wetlands, covered by **sandy soils and stunted shrubs, is home to pastoralists**
- The loss of thousands of hectares of arable land to **desertification** in the region's northern fringes has led land cultivators and pastoralists to move to the wetlands to access the water
- The wetlands also support a large number of livestock, ranging from about 200,000 cattle in the wet season to about 500,000 cattle in the dry season, as well as about 1.5 million other animals such as camels, goats, and sheep.
- Most of the **pastoralists do not have rights to the land** and depend mostly on open rangelands, crop residues, and browsing to feed their animals.

Wilson Center, 2012.

Climate-induced conflict: West African Sahel

- **Wherever the pastoralists are allowed to settle, as they are increasingly doing, they are not given rights to the land, and as pressures on land increase, conflicts often break out between these pastoralists and their landlords over access to land and water resources.**
- The introduction of **all-year farming** in the wetlands hampers the pastoralists' access to crop residues, as the farmers burn down the fields immediately to prepare for dry-season farming. The addition of farms around water bodies has left insufficient passage for livestock to reach drinking points, escalating conflicts. In addition, farmers have encroached on most of the traditional cattle routes, largely due to government efforts to encourage commercialized agriculture and promote crop production.
- The police have been accused of extorting money from the parties, especially the pastoralists. The pastoralists complain that since they had no land title or land rights, the courts favor the farmers in crop-damage cases.
- **Hadejia-Nguru Wetlands Conservation Project** of IUCN-World Conservation Union (since 1987): realizing that **a major source of this conflict was the lack of access to fodder for livestock**, this project promoted the cultivation of fodder by the farmers to sell to the pastoralists at a subsidized rate.

Wilson Center, 2012.

The food security challenge in Africa is at the heart of the humanitarian-development nexus, especially in the context of climate change

The challenge for agriculture and food systems in Africa

- **The largest proportion of food-insecure people is located in SSA**, where more than a quarter of people were undernourished in the period 2010-2012 (IPCC, 2014), with a concentration in rural areas
- **Agriculture is the backbone of African economies**, accounting for as much as 40% of the total export earnings and employing 60 to 90% of the total labour force in Sub-Saharan Africa (SSA)
- **Africa is the most vulnerable continent in the world (poverty + agro-climatic conditions)**
- **Climate change is already having a negative impact on food security**, through the impact on agriculture, affecting major crops, livestock production and fisheries. Agriculture also contributes significantly to global climate change: it is **responsible for 18-31 percent of CO_2 emissions**
- **The bulk of agricultural systems in SSA are climate-dependent**: rain fed agriculture accounts for more than **95%** of farmed land in SSA
- The countries in this region are already suffering from insecurities due to **low productivity, because of degraded soils, high levels of evaporation, droughts, floods and a general lack of effective water management**

Evolving context

- Rapid population growth, urbanisation & changing consumption patterns
- Emerging issues: climate change, youth leaving agriculture, land degradation, land acquisitions, food price spikes, etc.
- Stronger engagement BRICS and Private Sector investment
- Impressive economic growth in the continent, but persistent poverty and food insecurity

A continent of opportunities

- Underused cultivable land, available in abundance in many areas
- Available water resources, often underexploited
- Available technological methods to rapidly (and sustainably) boost productivity
- Promising markets, especially urban/regional markets
- An improved macroeconomic framework

Agricultural transformation in Africa: a second/different/sustainable Green Revolution?

- In order to feed the African growing and urbanizing population sustainably, **agricultural productivity needs to grow alongside better food systems efficiency, promotion of nutrition, job creation and protection of biodiversity and ecosystems**.
- Africa that has around **60% of the world's uncultivated arable land suitable for crop production & the highest margins for improving the productivity of already cultivated land.**
- **Africa is attracting increasing attention by local and foreign investors**
- African agriculture will undoubtedly contribute to achieving global food security in coming decades. **But it risks also contributing to the worsening of human impact on climate change if its development path will not be environmentally sustainable**, given that agriculture and deforestation account for around 30% of global greenhouse gas emissions (more than energy supply, at around 25%).

Business as usual in our globally interconnected food system will not bring us food security and environmental sustainability. Several converging threats – [...] climate change, population growth [...] – are steadily intensifying pressure on [...] governments to transform the way food is produced, distributed and consumed. (Beddington et al., 2011)."

The food security challenge in Africa is at the heart of the humanitarian-development nexus, especially in the context of climate change

The potential of CSA

The (sustainable) food production challenge in Africa: a focus on possible solutions

- The combined global food, environmental and climate challenges call for urgently supporting the transition to **sustainable agriculture (SA)** all over the world.

- In its broadest sense, SA refers **to *"the production of food [...], using farming techniques that protect the environment, public health, human communities, and animal welfare. This form of agriculture enables us to produce healthy food without compromising future generations' ability to do the same"*.**

Making the case for "climate smart agriculture" (CSA) in Africa

The 3 pillars of CSA

Source: www.fao.org/climatechange/

CSA "triple win" approach: increased productivity, mitigation and adaptation

About CSA

The concept of Climate-Smart Agriculture (CSA) was originally developed by FAO and officially presented and at the Hague Conference on Agriculture, Food Security and Climate Change in 2010, through the paper "Climate-Smart Agriculture: Policies, Practices and Financing for Food Security, Adaptation and Mitigation".

CSA is an approach to developing the technical, policy and investment conditions to achieve sustainable agricultural development for food security under climate change. The magnitude, immediacy and broad scope of the effects of climate change on agricultural systems create a compelling need to ensure comprehensive integration of these effects into national agricultural planning, investments and programs.

The CSA approach is designed to identify and operationalize sustainable agricultural development within the explicit parameters of climate change. However, achieving the transformations required for CSA and meeting these multiple objectives requires an integrated approach that is responsive to specific local conditions. Coordination across agricultural sectors (e.g. crops, livestock, forestry and fisheries) as well as other sectors, such as with energy and water sector development is essential to capitalize on potential synergies, reduce trade-offs and optimize the use of natural resources and ecosystem services.

FAO has developed a number of materials to guide stakeholders on the issues of climate smart agriculture (CSA).

Source: www.fao.org

Climate-smart agriculture (CSA), FAO

Food and Agriculture Organization of the United Nations

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Climate-Smart Agriculture

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Climate-smart agriculture (CSA) is an approach that helps to guide actions needed to transform and reorient agricultural systems to effectively support development and ensure food security in a changing climate. CSA aims to tackle three main objectives: sustainably increasing agricultural productivity and incomes; adapting and building resilience to climate change; and reducing and/or removing greenhouse gas emissions, where possible.

CSA is an approach for developing agricultural strategies to secure sustainable food security under climate change. CSA provides the means to help stakeholders from local to national and international levels identify agricultural strategies suitable to their local conditions. CSA is one of the 11 Corporate Areas for Resource Mobilization under the FAO's Strategic Objectives. It is in line with FAO's vision for Sustainable Food and Agriculture and supports FAO's goal to make agriculture, forestry and fisheries more productive and more sustainable".

Source: www.fao.org

Climate-smart agriculture (CSA), CGIAR - CCAFS

ENGLISH FRANÇAIS ESPAÑOL

CGIAR RESEARCH PROGRAM ON Climate Change, Agriculture and Food Security CCAFS

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Climate-Smart Agriculture

Also available in Français, Español

Why do we need climate-smart agriculture?

The UN Food and Agriculture Organisation (FAO) estimates that feeding the world population will require a 60 percent increase in total agricultural production. With many of the resources needed for sustainable food security already stretched, the food security challenges are huge. At the same time climate change is already negatively impacting agricultural production globally and locally. Climate risks to cropping, livestock and fisheries are expected to increase in coming decades, particularly in low-income countries where adaptive capacity is weaker. Impacts on agriculture threaten both food security and agriculture's pivotal role in rural livelihoods and broad-based development. Also the agricultural sector, if emissions from land use change are also included, generates about one-quarter of global greenhouse gas emissions.

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Our research flagships

- Climate-Smart Agricultural Practices
- Climate Risk Management
- Low Emissions Agriculture

Source: https://ccafs.cgiar.org/

CSA: A holistic concept/approach

	Food Security (Sustainable productivity improvement)	Adaptation (Building resilience)	Mitigation (reducing GHG emissions and enhancing GHG removal)
Farm issues	- Sustainable intensification - Integrated farming - Improved nutrient and water management	- Conservation agriculture - Adjust crop calendars - Use different crop cultivars and animal species and strains - Integrated pest, disease and weed management	- Precision agriculture - Improve soil-carbon storage/Develop carbon sequestration options (conservation tillage, cover cropping, crop rotation)
Landscapes and regional issues	- Landscape approach - Restoration of degraded farm lands, wetlands and forests	- Ecosystem-based agriculture (to improve ecosystem services) - Agro-forestry (enhance the role of forests)	- Agro-ecology
Institutional and policy issues	- Strengthening science-policy linkages - CSA mainstreaming in agricultural development policy frameworks - Trade-offs between diversification vs specialization - Gender, youth involvement & reduction inequalities	- Enhanced weather information systems and advisory services - Empower women and the poor - Pro-poor financing, insurance mechanisms and safety nets	- Incentives for pro-poor mitigation

Source: ECDPM (2016)

CSA: a politicised concept/approach?

How Climate-smart Agriculture Is Improving the Lives of Millions Around the World

http://www.huffingtonpost.com/bruce-campbell-phd/how-climate-smart-agriculture-is-improving_b_4255424.html

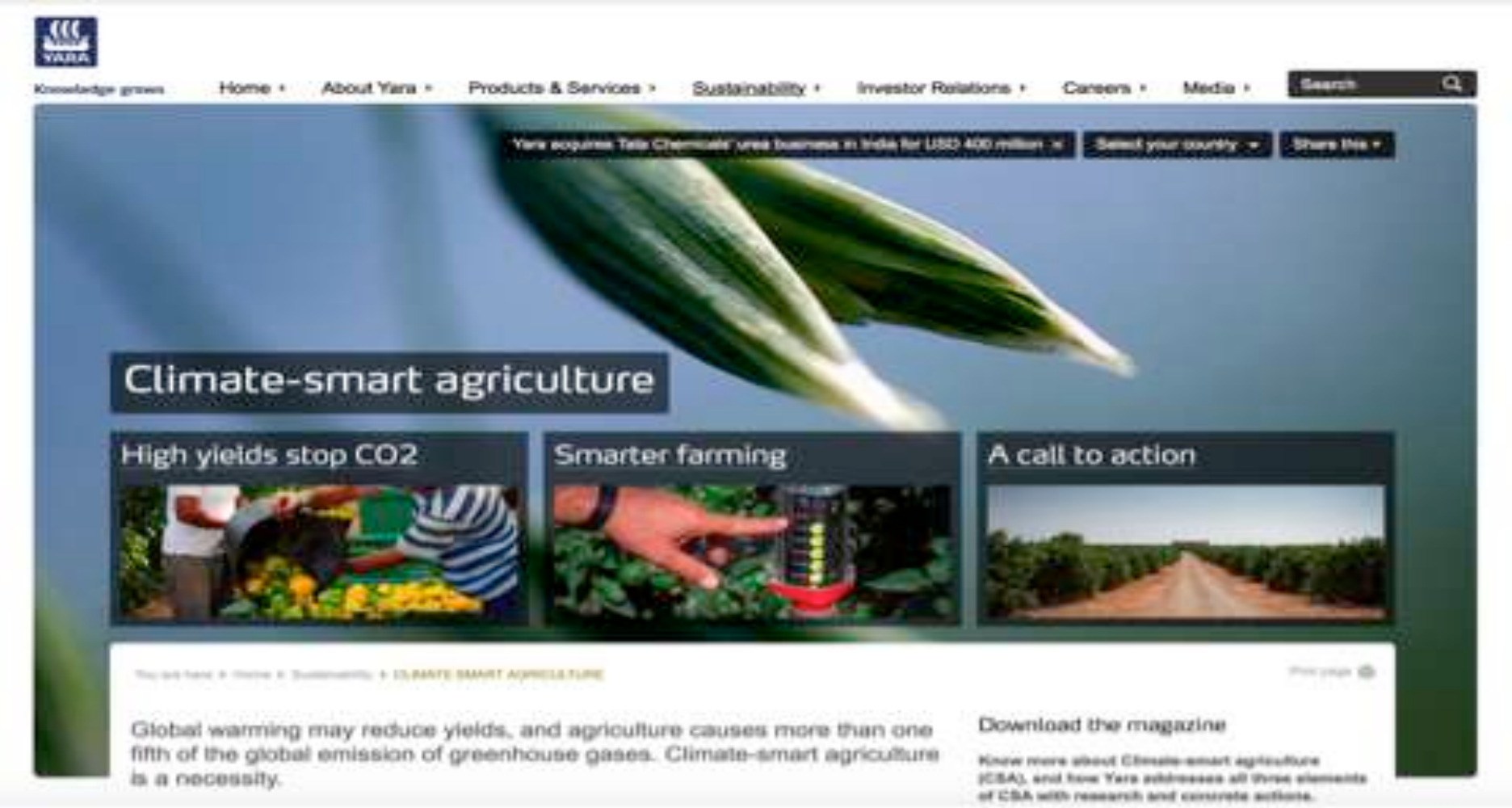
Happy Cows Help Save the Planet: Climate-Smart Agriculture in Costa Rica

http://www.worldbank.org/en/news/video/2013/10/08/happy-cows-help-save-planet-climate-smart-agriculture-costa-rica

Climate Summit: Don't turn farmers into 'climate smart' carbon traders!

http://www.etcgroup.org/content/climate-summit-dont-turn-farmers-climate-smart-carbon-traders

CSA: a politicised concept/approach?



Source: http://yara.com/

CSA: a politicised concept/approach?

- *"CSA has become the new slogan for the agricultural research establishment and the corporate sector to position themselves as the solution to the food and climate crisis. For the world's small farmers, there is nothing smart about this. It is just another way to push corporate controlled technologies into their fields and rob them of their land." (*Pat Mooney of the ETC Group)
- *"The top-down approach, in which the most sequestration effective practices are prioritised over the most adaptable or context-specific approaches, is another incredibly significant social issue with CSA, not to mention the impact of having scientists from the World Bank coming and telling them how to run their farm."* (Zundel, 2012, on www.earthinbrackets.org)

- *"Many fear that investments in CSA will skew agricultural investments away from the concerns of the poorest and most vulnerable groups and towards large-scale agriculture. [...] Who defines the agenda? Are interventions driven by particular donor or commercial interests?" (*Naess, 2012)
- *"CSA is not sufficient to achieve sustainable food security, which must involve the entire livelihood of farmers, infrastructure and access to the markets"* (Wheeler & von Braun, 2013)
- *"Pursuing climate-smart agriculture is not a luxury – it's an imperative. Let's make this a ground-breaking move towards real advances in sustainable agriculture. We need to act now."* (Rachel Kyte, Vice President for Sustainable Development, World Bank 2013)

CSA: a politicised concept/approach?

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Clever Name, Losing Game? - How Climate Smart Agriculture is sowing confusion in the food movement

Climate Change | Food & land rights

'Climate Smart Agriculture' is gaining increasing attention among governments, NGOs, academics, corporations and international policy spaces. As proponents attempt to use the climate negotiations at the UNFCCC (United Nations Framework Convention for Climate Change) and the UN Secretary-General's Climate Summit to obtain official endorsement of the concept, a range of stakeholders are starting to take note and ask questions.

With the impacts of climate change being felt on food systems around the world, and the contribution of agriculture to global emissions also gaining attention, agriculture is one of the issues at the heart of climate change concerns. The concept of 'Climate Smart Agriculture' was developed by the FAO and the World Bank, claiming that 'triple wins' in agriculture could be achieved in mitigation (reducing greenhouse gas emissions), adaptation (supporting crops to grow in changing climate conditions), and increasing crop yields. But there is growing confusion and debate over what the term really means, what it can achieve, what is new about it, and whether it really can benefit food systems in the face of climate change.

Increasingly, civil society and farmer organisations are expressing concerns that the term can

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Source: http://www.actionaid.org/

Other options/labels? Conservation agriculture

Conservation agriculture (CA) = a set of soil management practices that minimize the disruption of the soil's structure, composition and natural biodiversity. CA has proven potential to improve crop yields, while improving the long-term environmental and financial sustainability of farming.

Source: http://www.fao.org/ag/ca/

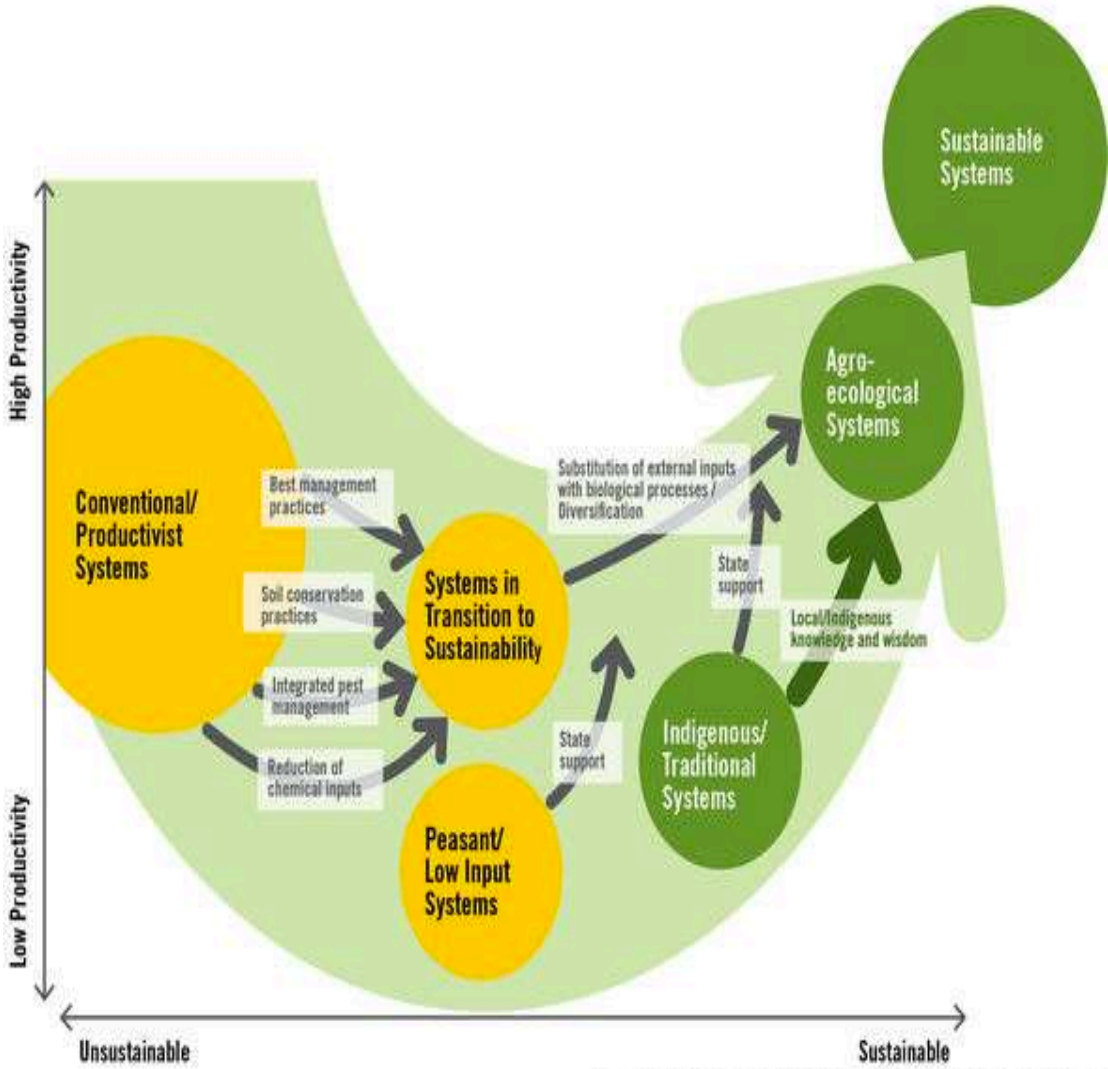
Other options/labels? Agroforestry

Agroforestry = a land use management system in which trees or shrubs are grown around or among crops or pastureland. It combines shrubs and trees in agricultural and forestry technologies to create more diverse, productive, profitable, healthy, ecologically sound, and sustainable land-use systems.

Other options/labels? Agroecology

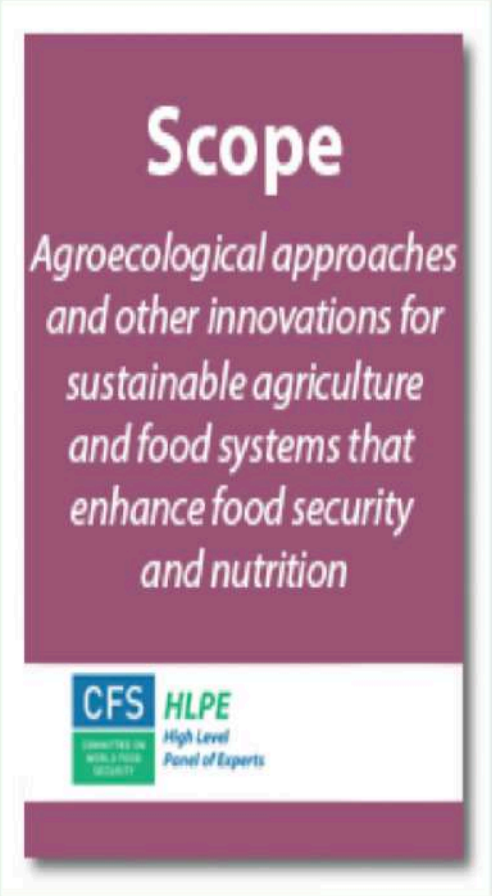
Agroecology applies ecological processes to agricultural production systems. Bringing ecological principles to agroecosystems can suggest novel and more sustainable management approaches that would not otherwise be considered

Agroecologists study a variety of agroecosystems, and the field of agroecology is not associated with any one particular method of farming, whether it be organic, integrated, or conventional; intensive or extensive, although it has much more in common with some of the before mentioned farming systems



Source: Latin America and the Caribbean, Summary for Decision Makers, p. 9

International push for Agroecology?



AGROECOLOGY & INNOVATIONS FOR FSN

18/10/2017 - The High Level Panel of Experts on Food Security and Nutrition launches today a **Call for Experts** and an **eConsultation on the Scope of the Study**:

Agroecological approaches and other innovations for sustainable agriculture and food systems that enhance food security and nutrition

Source: http://www.fao.org/cfs/cfs-hlpe/en/

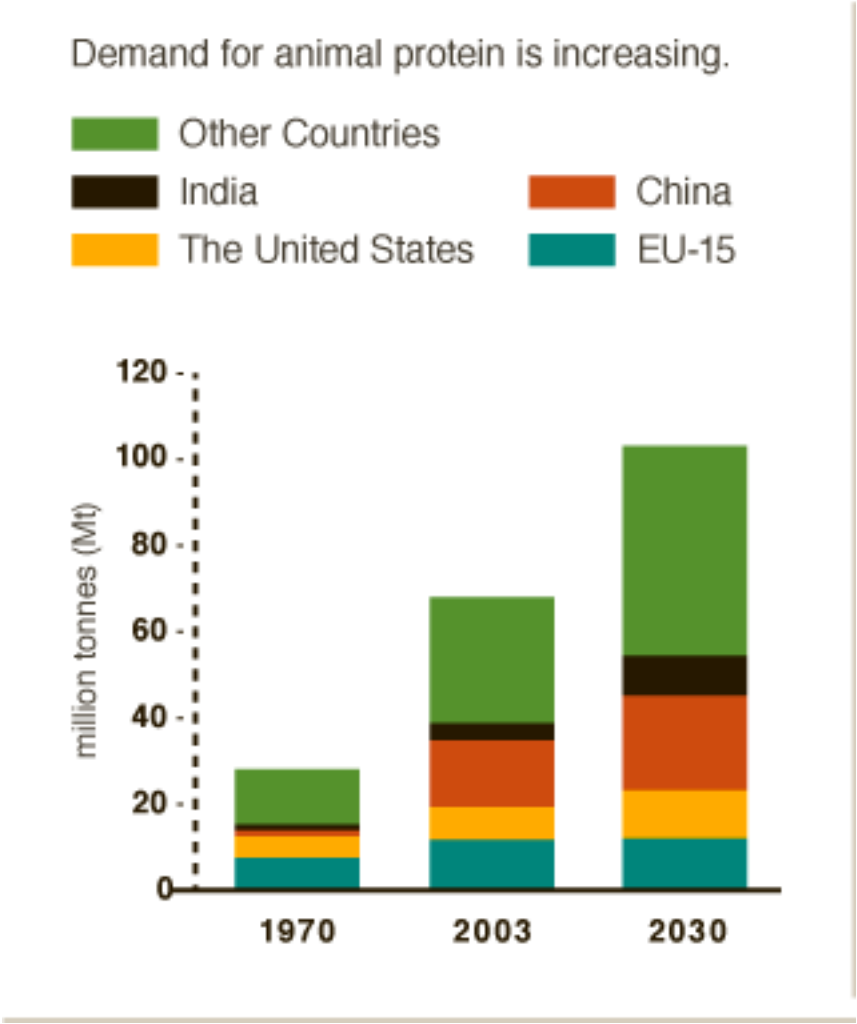
CSA case-study

The livestock value-chain

CSA case study: the livestock value chain

Increasing consumption in animal protein worldwide

(population growth, increasing purchasing power, urbanization, changing diets)



Source: https://ccafs.cgiar.org/

Case study: the livestock value chain

Pressure on the environment:

negative impacts of livestock production

15% climate change

8% water withdrawal

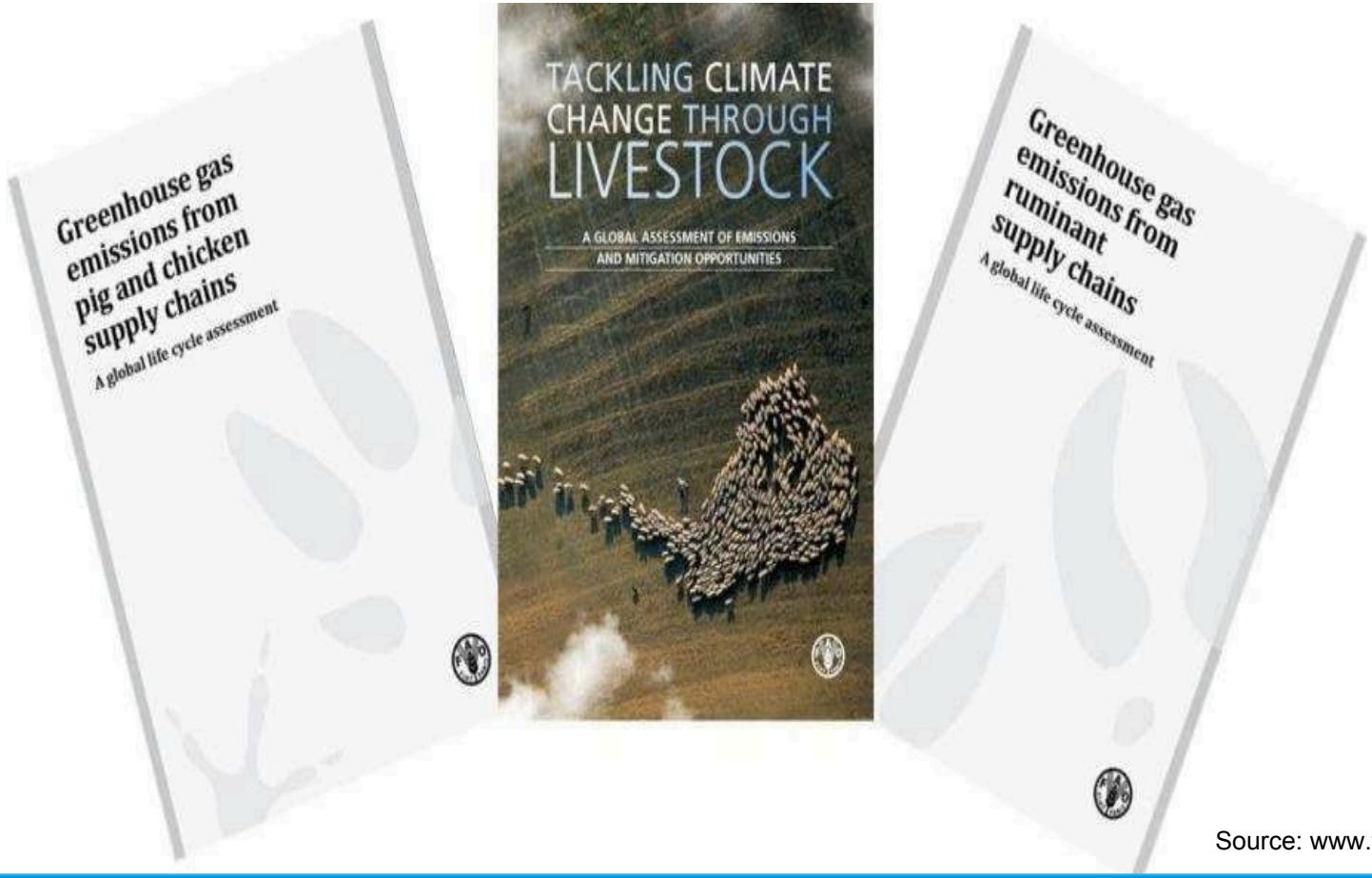
70% agricultural land

degradation & deforestation

Steinfeld et al. 2006; Gerber et al. 2013

Case study: the livestock value chain

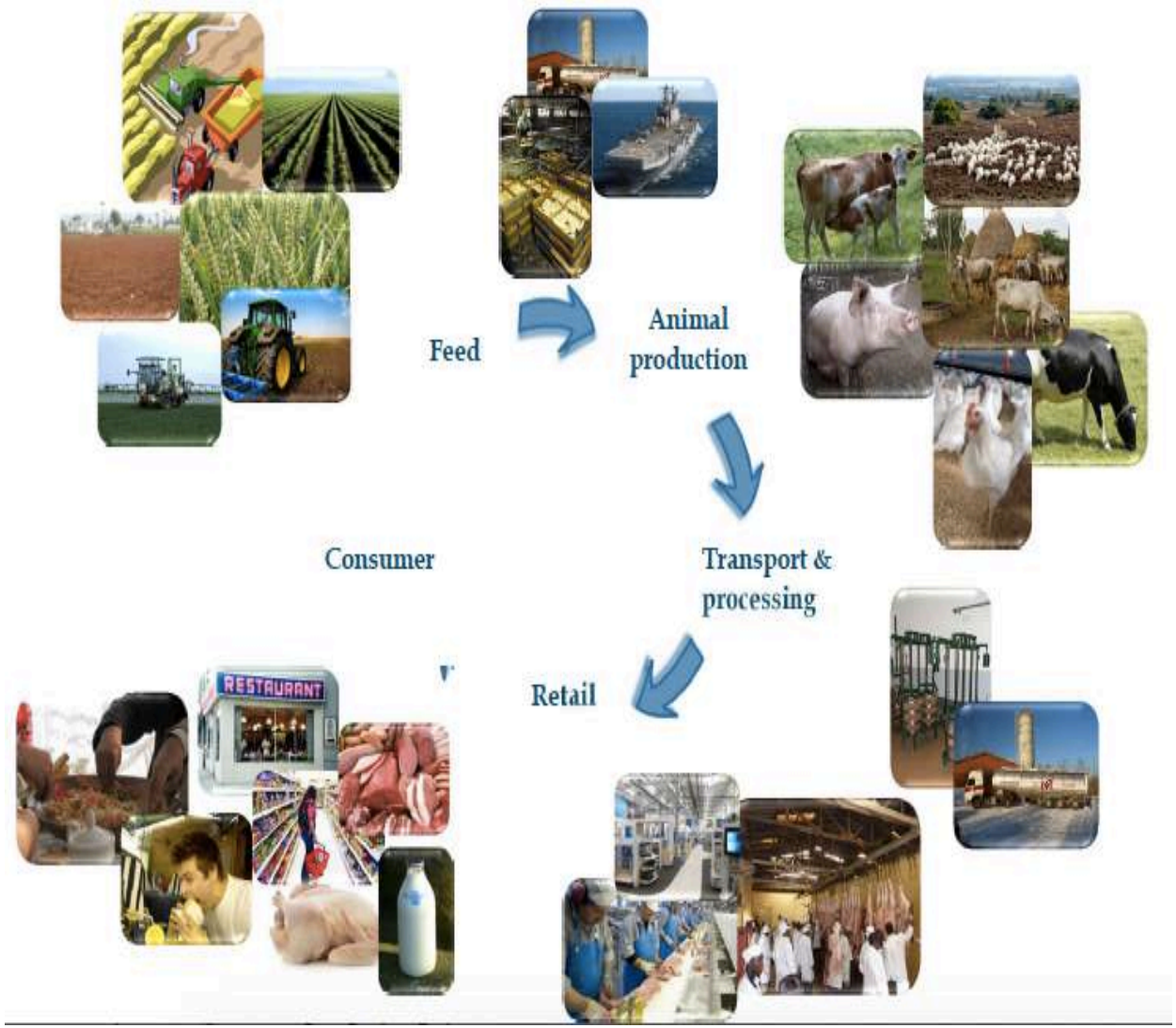
The livestock sector is responsible for **14.5%** of global anthropogenic GHG emissions



Source: www.fao.org

Case study: the livestock value chain

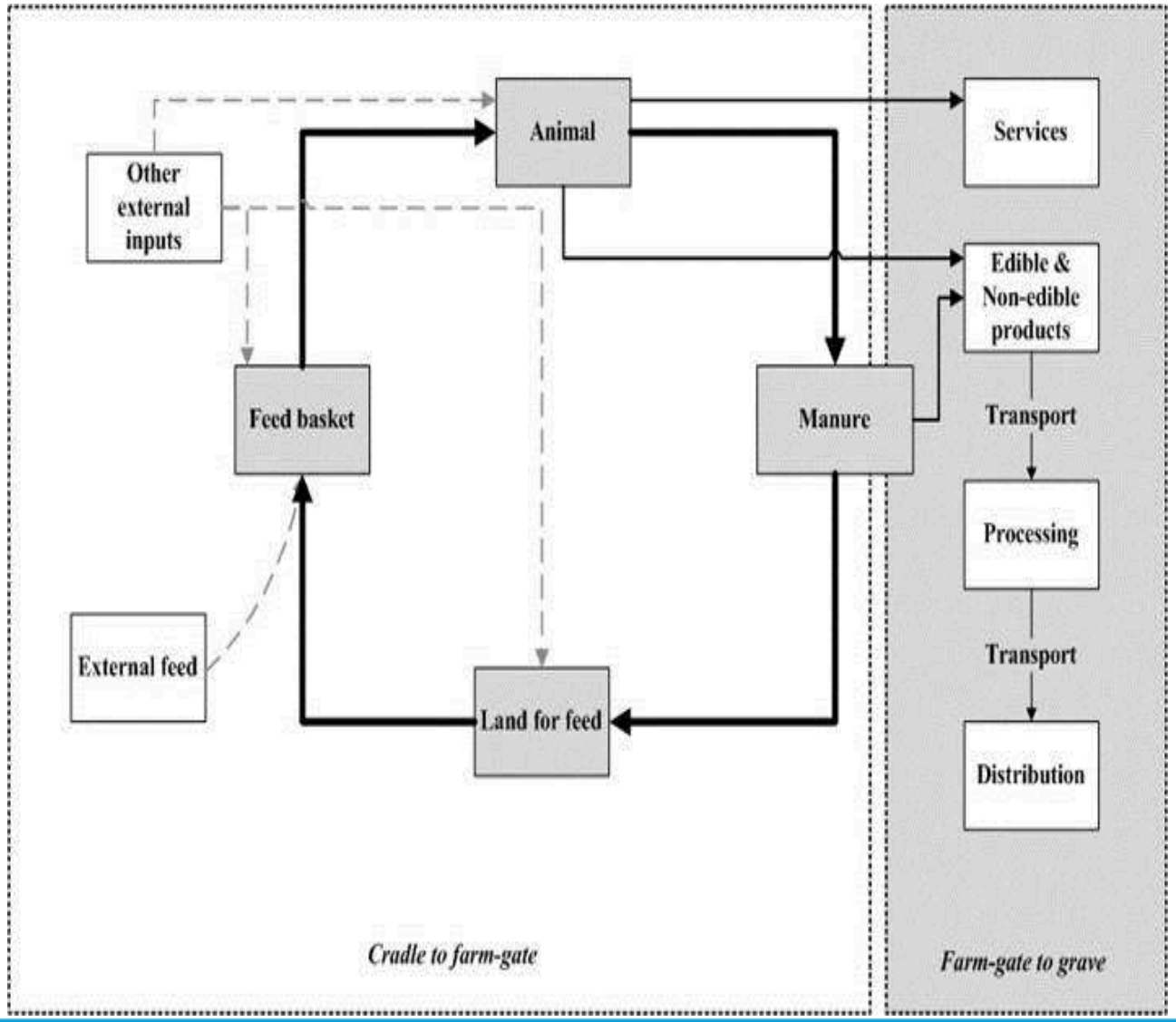
Life Cycle Assessment (LCA): method to evaluate use of resources and emission of pollutants during the life cycle of a product



Case study: the livestock value chain

Single issue LCA:
GHG emissions

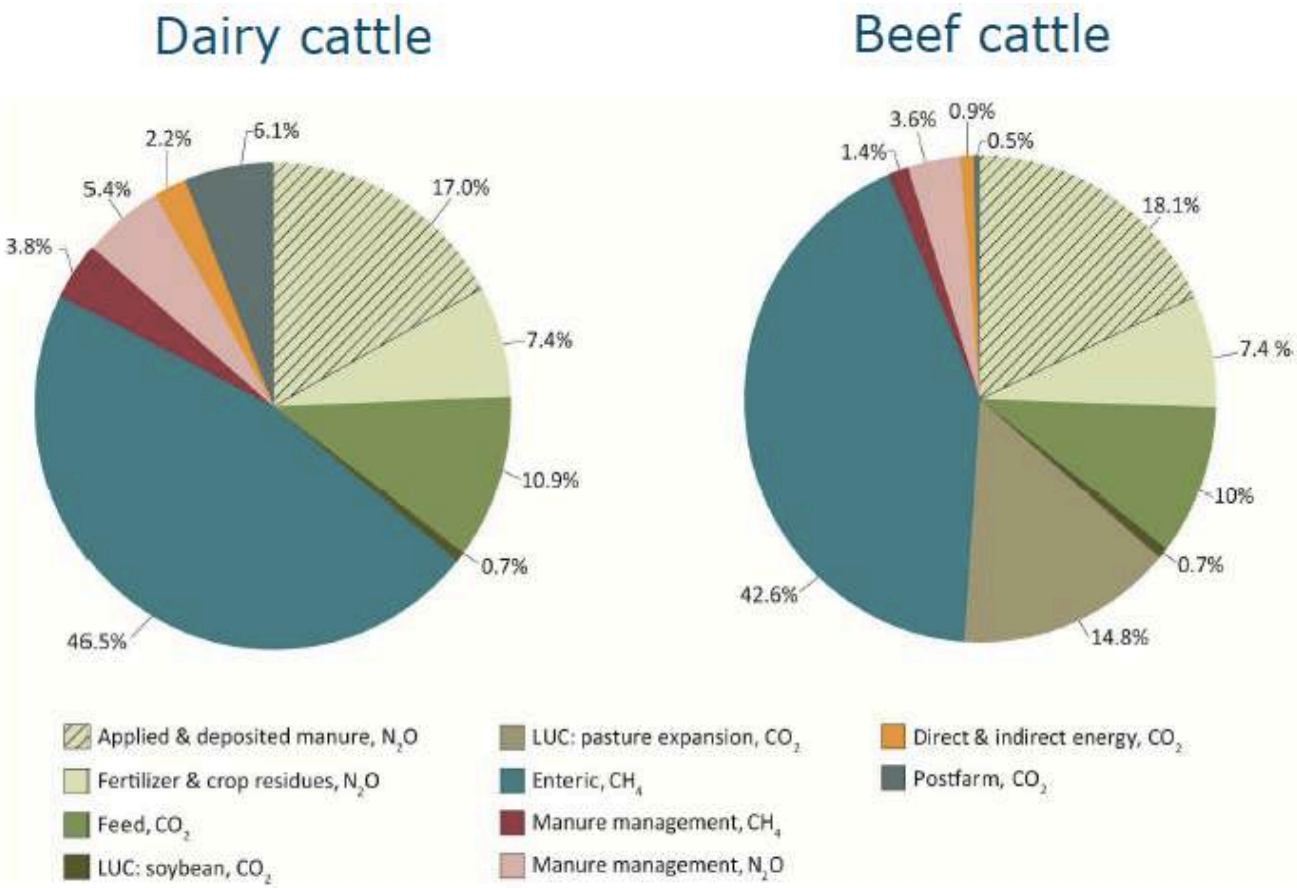
What (CO2, CH4, N2O) emits where?



Source: www.fao.org

Case study: the livestock value chain

Contribution of life cycle stages: cattle



Source: www.fao.org

Case study: the livestock value chain

Potential to reduce environmental externalities in livestock sector is HUGE! There are many options:

- Resource efficiency (improved feeding techniques, cross-breeds)
- Mix traditional practices with new agricultural research
- Promote mixed crop-livestock systems (reduces resource depletion, promotes biodiversity, increases system flexibility to cope with socio-economic and climate variability)
- Cross-breeding cattle
- What about pastoralism in drylands? *"Pastoralism is often considered to be an effective and suitable farming system in the arid areas of Africa. It should therefore be supported and shared resources should be managed, particularly in the drylands."*

TABLE 1

Major agricultural systems in SSA (ILRI,[1] n/d)

ZONE	CROP/LIVESTOCK INTEGRATION	MAJOR AGRICULTURAL SYSTEMS	MAJOR LIVESTOCK OUTPUTS
Humid	Pure crop	Forest/permanent trees: roots/cereals (trypanotolerant livestock)	Peri-urban milk
Sub	Crop-livestock	Cereals (maize/sorghum) - livestock	Meat, milk, draught power
Highland	Well integrated crop-livestock	Cereals (wheat/teff) - livestock	Power, meat, milk
Semi-arid	Livestock-crop	Cereals (sorghum/millet) - livestock	Milk, draught power
Arid dryland	Pure livestock	Pastoral	Milk, meat

1 See: http://www.fao.org/wairdocs/ilri/x5462e/x5462e0e.htm.

Note: Most potential for fodder production is in the humid zone, which currently has few livestock. Major concentrations of livestock are in the semi-arid zone, despite its low potential for supplying fodder year-round.

Source: ECDPM, UNEP (2017)
http://ecdpm.org/publications/make-food-value-chains-environmentally-sustainable-resilient/

Example 1: Improving feed resources

Livestock systems intensification through improving feed resources: feeding ligneous plants leaves to cattle

The leaves and fruits of ligneous plants (including trees, small trees and shrubs) are important, high-value fodder for livestock. In arid and semi-arid zones, they provide the largest part of the protein supply during the driest months. For example, it is estimated that during the three driest months of the year, up to 80 percent of the protein ration in the Sahel is provided by plants from the Capparaceae family.[1] There is considerable evidence to show that appropriate tree species, when planted on smallholder farms, can be climate-smart across a wide range of situations.

One such tree is Leucaena leucocephala, which has highly nutritious leaves that, when fed as a supplement to livestock, can substantially increase meat and milk yield compared with a low-quality baseline diet. As the CSA guide notes, planting species such as Leucaena on a mixed farm and using them as a feed supplement can thus increase productivity per animal while also increasing resilience, as it can have a substantial impact on household income. For example, feeding 1 kg of Leucaena leaves per animal per day can nearly treble milk yields and live-weight gains (Thornton & Herrero, 2010). The aggregated effects of widespread adoption of this option in the mixed systems of the tropics also has substantial mitigation potential because the intensified diet could substantially reduce the number of ruminants needed to satisfy the future demand for milk and meat (by 42 million and 52 million animals, respectively, by 2030). At the same time, the leaves improve the diet of ruminant livestock, resulting in a substantial reduction in the amount of methane produced per animal per kilogram of meat and milk produced. Local-level challenges include household labour resources, the availability of appropriate planting material and marketing know-how, although these are not insuperable barriers to the widespread uptake of this option. More general challenges include the fact that since the Leucaena is not native to Africa, its overuse risks going against agroforestry or sustainable agriculture goals, such as using indigenous species to promote ecosystem resilience and protect biodiversity. The broad distribution of this tree also makes it particularly sensitive to diseases and parasites. On the other hand, the native Erythrina burana used by Central Ethiopian farmers to shade their coffee plantations is very common in this part of the world, but scientists only recently became aware of its nutritional properties: buranas provide nutritious fodder for the dry season and the leaves, pods and even bark are palatable to animals. The tree is easy to multiply from seeds or cuttings (large cuttings of 2 m in length and 10 cm in diameter are usually used). It is therefore an important multi-purpose tree in agroforestry (CSA guide).[2]

Source: ECDPM, UNEP (2017)

Example 2: Improving cattle breeds

Improving cattle breeds: changing from local breeds to crossbred cattle

The local breeds of cattle that are farmed in the developing world are well adapted to their environments in terms of disease resistance, heat tolerance and low nutrition needs. However, their productivity is low and the amount of GHG emissions produced per kilogram of milk and meat can be very high. Selecting more productive animals is therefore one strategy that can enhance productivity and reduce emissions intensity. To this end, researchers have attempted to utilize natural genetic variations in cattle populations to breed reduced-emissions cattle, but results have so far been inconclusive.

Cross-breeding programmes can deliver simultaneous adaptation, food security and mitigation benefits. These strategies that make use of locally adapted breeds that are tolerant to heat, poor nutrition, parasites and diseases will become increasingly useful as the climate changes. Cross-breeding coupled with diet intensification can lead to substantial efficiency gains in livestock production and methane output. With widespread uptake, this would result in fewer but larger, more productive animals being kept, which would have positive consequences for methane production and land use. As crossbred animals produce more milk and meat, fewer animals are required to meet demand. Thornton and Herrero (2010) estimated the impacts of widespread adoption of crossbred animals (29 percent by 2030) on meat production in the rangeland systems and on dairy production in the mixed systems of the tropics, finding that the larger animals produce more than double the amount of milk and meat, compared with local breeds.

Source: ECDPM, UNEP (2017)

Example 3: Improving grazing management

Case study: improved grazing management via improved dialogue and shared resources use agreements: the case of pastoralism between Ethiopia and Kenya

The Borana and Gabra pastoral tribes have historically come into conflict over pasture land, water and natural resources due to extreme weather conditions and droughts. The Oromia Pastoralist Association (OPA), created in 2006 to facilitate the cross-border mobility of pastoralist tribes between southern Ethiopia and northern Kenya, is helping address land disputes, resource conflicts and the barriers facing these vulnerable groups in terms of climate change adaptation. The association pursues peaceful coexistence through cross-border community dialogue and the co-creation of conflict resolution strategies, including 'reciprocal resource use agreements', which are helping reduce overgrazing and soil erosion, improve market access for pastoralist products, and build resilience to climate-related stresses. Thanks to OPA's activities, recent years have seen no community conflicts. The model, which has the potential to be transferred to neighbouring regions where resource and water scarcity are growing challenges, has already been replicated in Somalia.[1]

Source: ECDPM, UNEP (2017)

Example 4: supporting mixed crop-livestock systems: manure management

case studies on mixed crop-livestock production systems

1 - Manure management along with other agroecology practices in West Africa: In central and southern Senegal, in agropastoral zones (groundnut basin), research has shown that it is possible to halve net GHG emissions from livestock by improving animals' feed regimes, covering stored manure with sheeting and digging it into the field. Furthermore, a pastoral zone in the north of the country has demonstrated that by fostering agroecological practices, the soil, trees and animals can capture enough carbon to offset emissions from the animals in a borehole catchment area. Furthermore, in northern Côte d'Ivoire and in Burkina Faso, in polyculture-livestock farming systems, the main innovations to boost soil carbon capture also involve applying agroecological principles (plant cover, intercropping, etc.), using organic fertilizers, and suggesting ecosystem governance systems (local land tenure charters, etc.).

2 - Use of kraal manure in Swaziland: The CSA practices and technologies that are being promoted, adopted and implemented in Swaziland include conservation agriculture, use of kraal manure, agroforestry and planting of drought-tolerant varieties. Kraal manure is essentially livestock waste consisting of organic material from the residues of plants that were digested by animals housed in a night enclosure, also known as a 'kraal'. It is collected from the night enclosure and transported to the field using different methods, such as manually using wheelbarrows or head pans, or in tractor trailers. About 23 percent of farmers in Swaziland used kraal manure, while 27.4 percent do not use any form of animal manure. More male than female farmers used animal manure or kraal manure, perhaps because cattle are generally owned by men (FAO, 2005, cited by Manyatsi & Mhazo, 2014). Other farmers use goat manure on high-value crops such as vegetables. A key advantage of using organic manure is its addition of nutrients to the soil. Kraal manure is less expensive than inorganic fertilizers and stimulates microorganisms that release nutrients (Manyatsi & Mhazo, 2014).

Source: ECDPM, UNEP (2017)

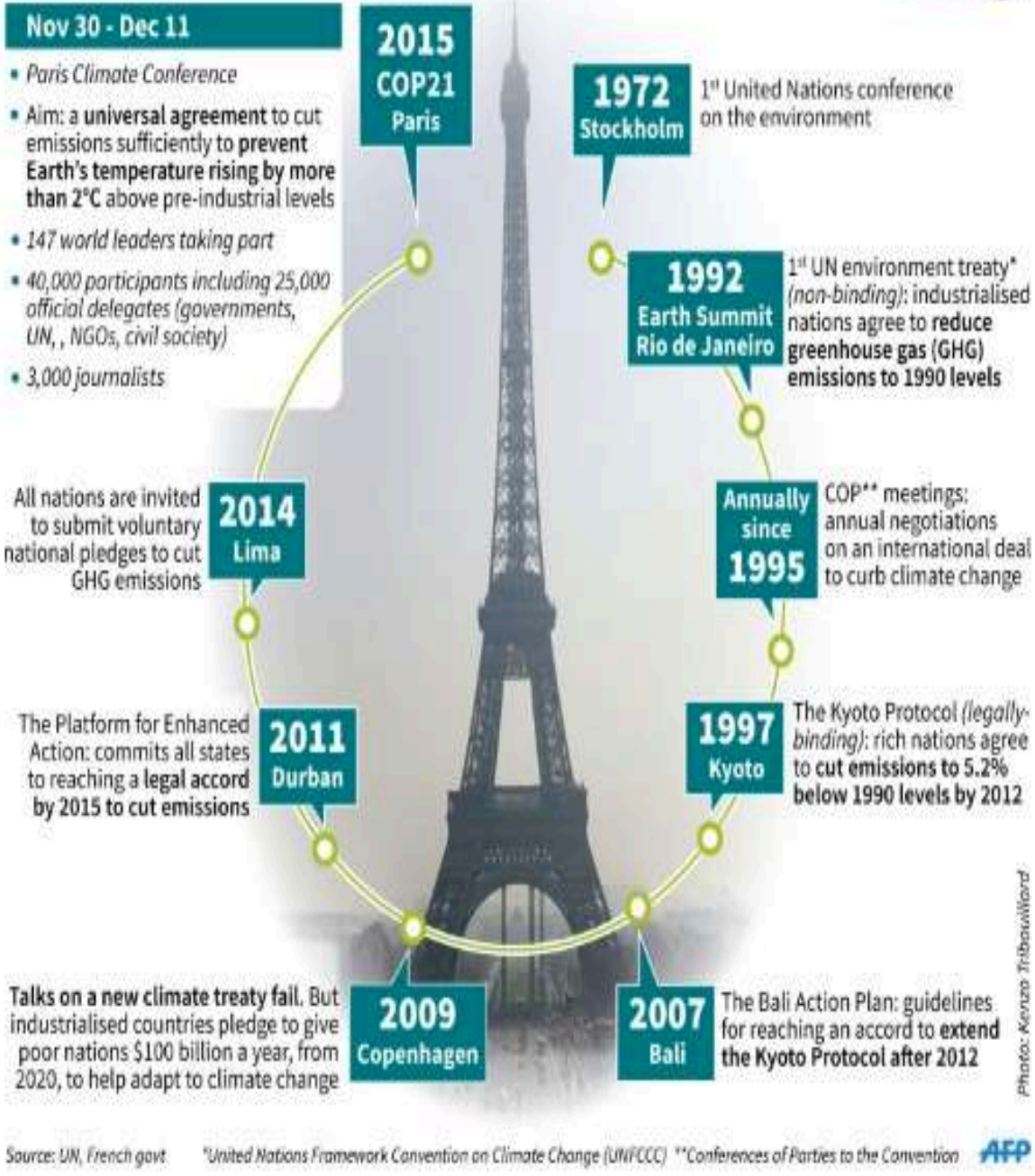
The policy frameworks for Agriculture, Food and Nutrition Security and Climate change

Connecting policies to address the root causes of humanitarian crises

The Sustainable Development Goals (SDGs)

The climate negotiations:

the long road to a global deal



Source: UN, UNFCCC

THE KEY ELEMENTS OF THE PARIS AGREEMENT

A text with universal scope, adopted by 195 countries

The aim: to keep the increase in global average temperature to well below 2°C and to 1.5°C if possible.

The objective: to level off greenhouse gas emissions as soon as possible.

The principal: to differentiate between developed and developing countries. Developed countries must lead the way for reduction of emissions and support developing countries in implementing this. Other countries with the ability to do so may also contribute their support on a voluntary basis to achieve this target.

The means: Countries must submit Intended Nationally Determined Contributions (INDCs) which are revised upwards every 5 years. The 1st report is due in 2023. North-South technology transfer.

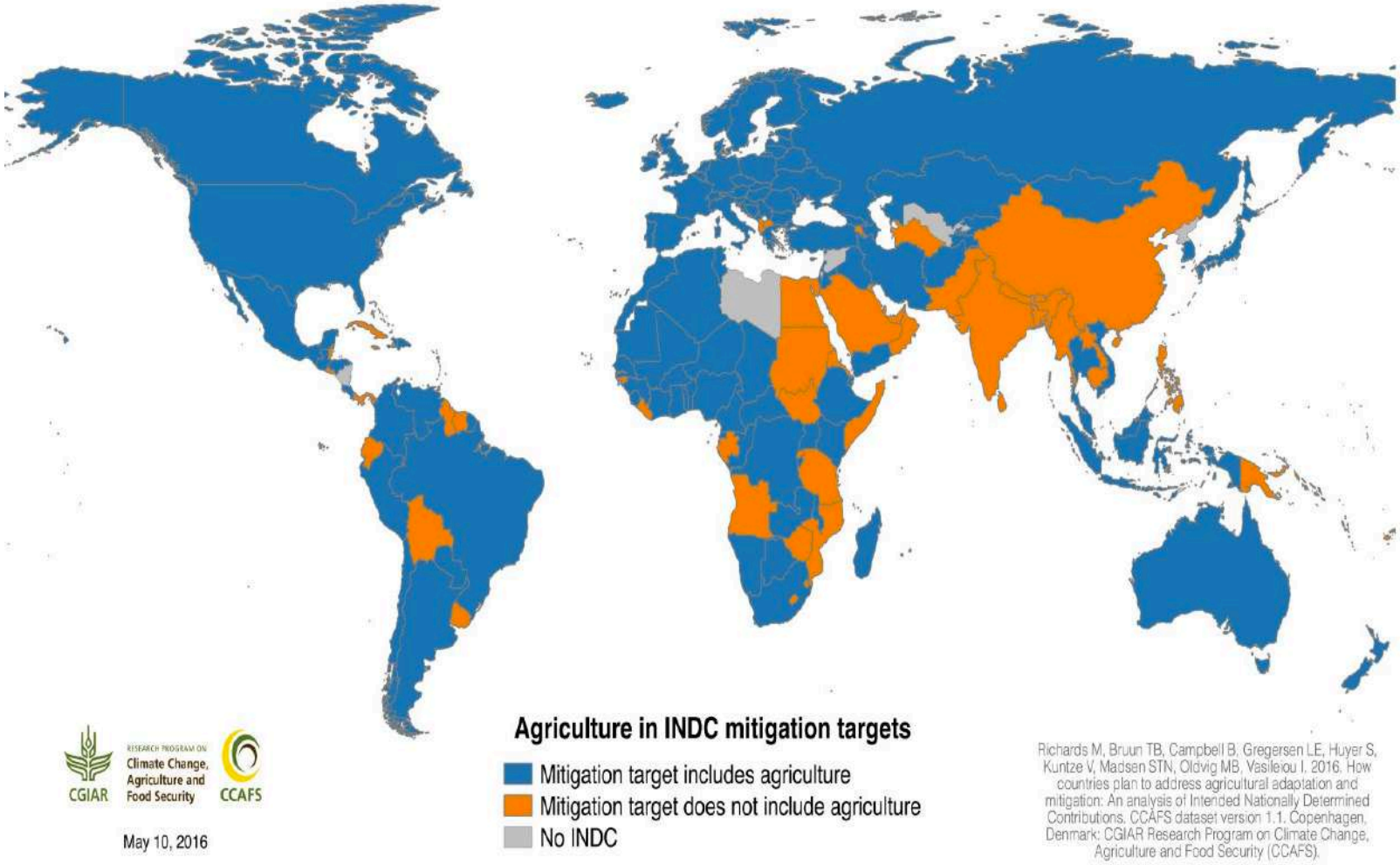
The financing: from 2020, rich countries must contribute at least $100 billion per year. This amount will be reviewed in 2025.

The new mechanism: loss and damage. Measures must be taken to avert, minimize and address the concrete effects of climate change, in order to help the most vulnerable countries.

Entry into force: 2020 if the Agreement is ratified by 55 countries accounting for 55% of global greenhouse gas emissions.

Source: http://www.novethic.com/paris-agreement.html

Agriculture in INDC mitigation targets



Source: https://ccafs.cgiar.org/

Climate change negotiations: little place for agriculture

- Formal negotiation on agriculture has failed to make headway
- Agriculture still remains high on the agenda on the sidelines of climate change negotiations
- The agricultural sector features prominently in the NDCs
- However, countries need support for implementation of their NDCs

African food security and agricultural policies

Comprehensive Africa Agriculture Development Programme (CAADP)

- African Union (AU), 2003, Maputo Declaration on Agriculture and Food Security
- The Declaration contained several important decisions regarding agriculture, but prominent among them was the "commitment to the allocation of at least 10% of national budgetary resources to agriculture and rural development policy implementation within five years".
- 23rd ordinary session of the African Union Assembly held in Malabo, Equatorial Guinea in 2014 recommitted to the CAADP principles and goals and defined a set of targets and goals – referred to as the Accelerated Agricultural Growth and Transformation Goals 2025.

African food security and agricultural policies

The AU Malabo Declaration (June 2014)

1. **Recommitment to the Principles and Values of the CAADP Process**

2. **Recommitment to enhance investment finance in Agriculture**
   - Uphold 10% public spending target
   - Operationalization of Africa Investment Bank

3. **Commitment to Zero hunger – Ending Hunger by 2025**
   - At least double productivity (focusing on Inputs, irrigation, mechanization)
   - Reduce PHL at least by half
   - Nutrition: reduce stunting to 10%

4. **Commitment to Halving Poverty, by 2025, through inclusive Agricultural Growth and Transformation**
   - Sustain Annual sector growth in Agricultural GDP at least 6%
   - Establish and/or strengthen inclusive public-private partnerships for at least 5 priority agric commodity value chains with strong linkage to smallholder agric.
   - Create job opportunities for at least 30% of the youth in agricultural value chains.
   - Preferential entry & participation by women and youth in gainful and attractive agribusiness

5. **Commitment to Boosting Intra-African Trade in Agricultural Commodities & Services**
   - Triple intra-Africa trade in agricultural commodities
   - Fast track continental free trade area & transition to a continental Common External tariff scheme

6. **Commitment to Enhancing Resilience of Livelihoods & Production Systems to Climate Variability and Other Shocks**
   - Ensure that by 2025, at least 30% of farm/pastoral households are resilient to shocks

7. **Commitment to Mutual Accountability to Actions and Results**
   - Through the CAADP Result Framework – conduct a biennial Agricultural Review Process

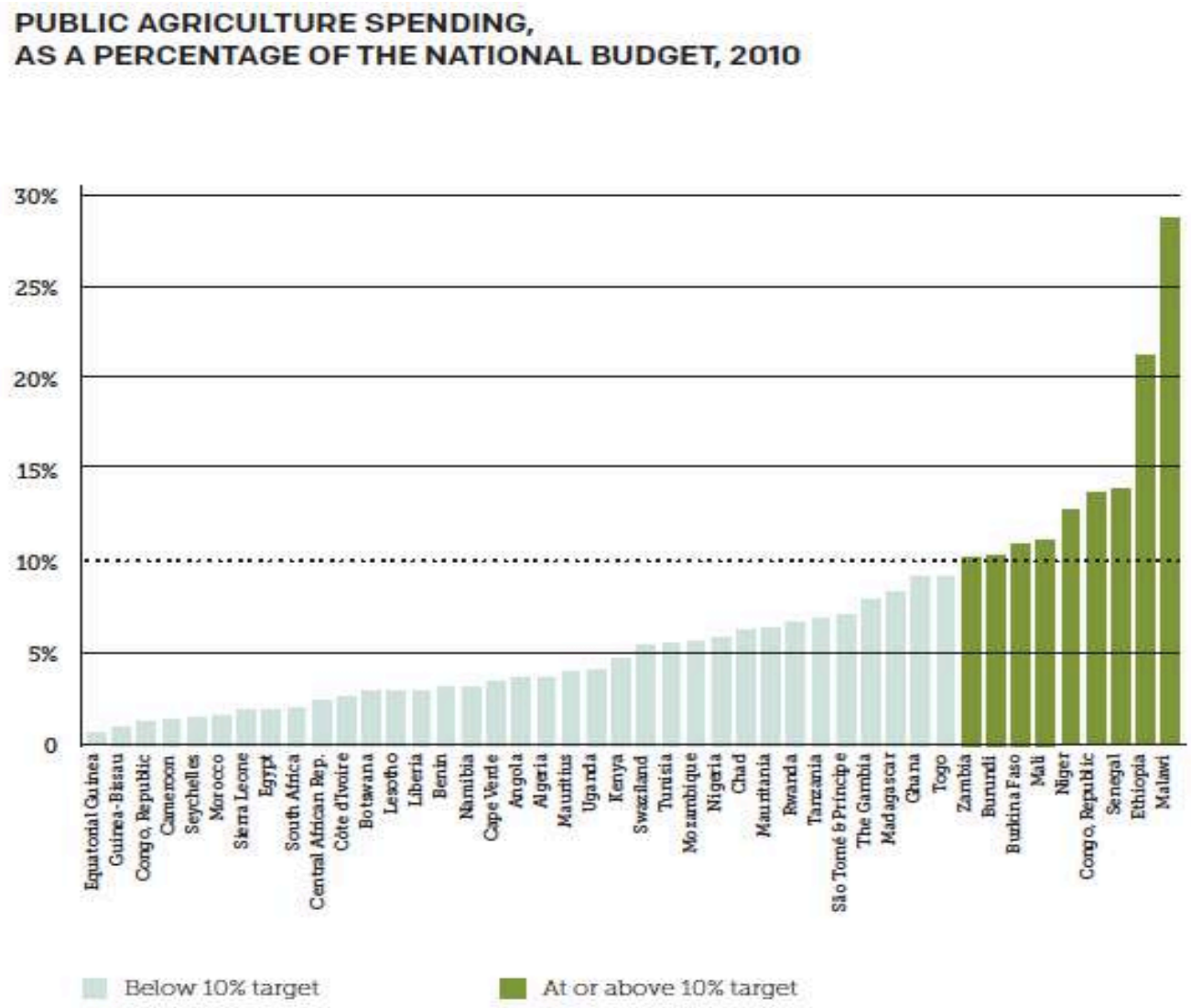
Source: http://www.nepad-caadp.net/sites/default/files/the_caadp_results_framework_2015-2025.pdf

African food security and agricultural policies

Comprehensive Africa Agriculture Development Programme (CAADP)

- Africa-wide consensus on critical role of agriculture for inclusive growth on the continent
- Strategic framework instead of just ‘one shot’ programme
- Beyond 10% and 6% commitments, focus on broader agricultural transformation
- Making a case for regional integration and coordination
- Promotes different way of policy-making (evidence-based, inclusive approach, …)

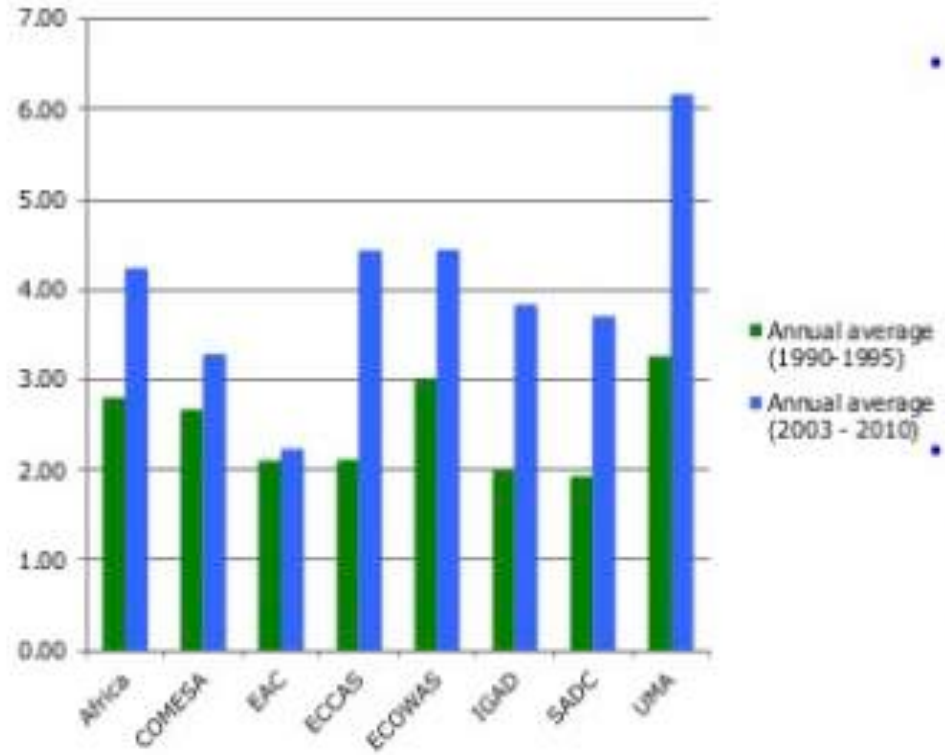
African food security and agricultural policies



Source: One, 2013

African food security and agricultural policies

CAADP process: agriculture growth rate by region



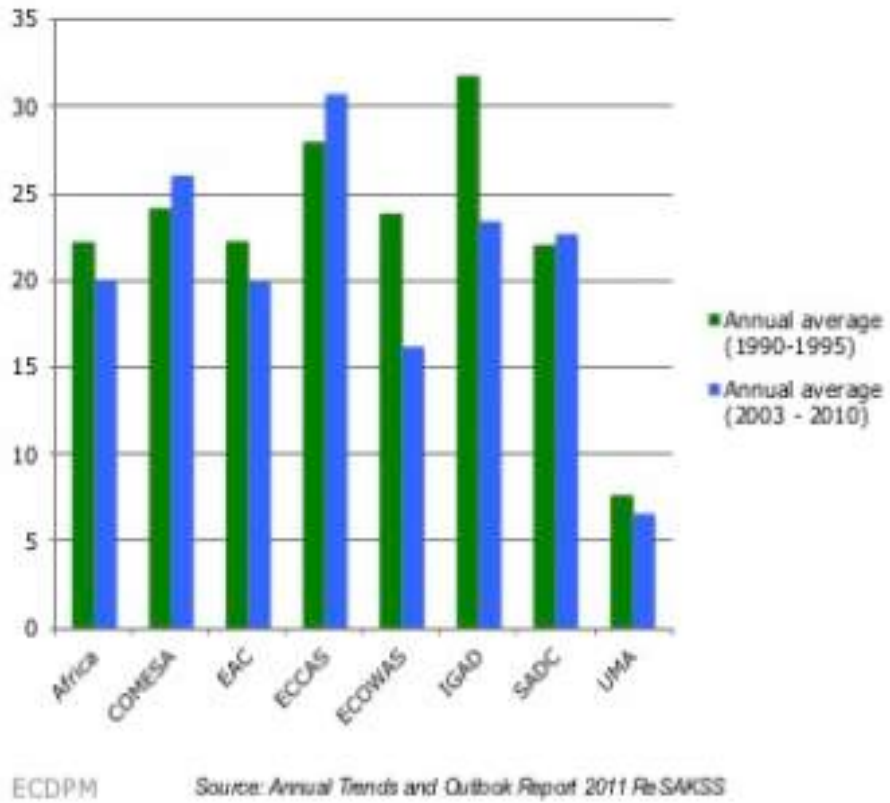
- African average 2003-2010 is 4.2%, ECOWAS just above continental average with 4.4%
- Production growth has increased 50% compared to early 1990s

Source: Annual Trends and Outlook Report 2011 ReSAKSS

Source: RESAKSS, 2011

African food security and agricultural policies

CAADP process: global hunger index



- Food security situation on the continent has improved only modestly compared to the 1990s
- Progress differs between and within regions, most progress in West Africa

Source: RESAKSS, 2011

African food security and agricultural policies: the case of ECOWAS

- ECOWAS= Maputo's star pupil (first region to sign regional compact)
- The majority of countries that have attained the Maputo 10% target are in ECOWAS (although sharp division between Sahelian countries generally meeting or exceeding the 10% target and coastal countries often lagging far behind)
- NAIP: a lot of progress, but they are criticized for the inadequacy of national financial commitments, their lack of realism and of innovation, and their failure to prioritize issues and take into account implementation instruments and current challenges (urban food demand, rural unemployment, cross-border trade, etc.)
- Regional agricultural policies: ECOWAP + PAU (prioritised value-chains, food sovereignty)
- Second generation of RAIP-FNS and NAIP-FNS (end 2017) take into account sustainability challenges
- Nevertheless: funding issue: ECOWAP= "patchwork" of donor programmes? + lack of regional approach in initiatives such as "Regional rice offensive".
- Trade instruments: CET: Majority of agricultural products included in the 35% tariff band + ETLS for free trade area, but poor implementation
- Industrialization/PS supported strategies not aligned/coherent, favoring export VCs
- Resilience/emergency initiatives: RPCA, AGIR... but also Food reserves in ECOWAP... Donor funding defining regional priorities?

CSA initiatives: GACSA

What is GACSA?

GACSA is an inclusive, voluntary and action-oriented **multi-stakeholder platform on Climate-Smart Agriculture (CSA).**

Its vision is to improve food security, nutrition and resilience in the face of climate change. GACSA aims to catalyse and help create transformational partnerships to encourage actions that reflect an integrated approach to the three pillars of CSA.

How does GACSA do it?

GACSA fosters knowledge learning, sharing, partnership building, while also providing a space for dialogue and debate.

What does GACSA Do?

GACSA works towards **three aspirational outcomes** to:

- Improve farmers' agricultural productivity and incomes in a sustainable way;
- Build farmers' resilience to extreme weather and changing climate;
- Reduce greenhouse gas emissions associated with agriculture, when possible.

Context specific priorities and solutions need to be aligned with national policies and priorities.

GACSA aims to catalyze and help create transformational partnerships to encourage the three pillars of Climate-Smart Agriculture (CSA) – productivity, adaptation and mitigation.

Source: http://www.fao.org/gacsa/en/

Africa CSA Vision 25x25

The Malabo Declaration (2014) on Accelerated Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods

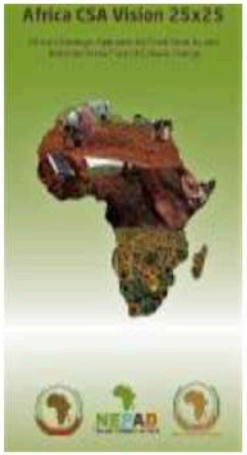
African Heads of State and Government:

- Endorsed the NEPAD Program on Agriculture and Climate Change and the establishment of an African **CSA Coordination Platform** through which NEPAD will collaborate with partners targeting 25 million farm households by 2025 (Vision 25X25);

- Recognize that vision 25X25 as an integral part of CAADP and relates to attaining CAADP's 2015-25 Results Framework

Source: www.nepad.org

Africa CSA Vision 25x25



In order to assure regional food and nutrition security, to build farmer livelihoods and to contribute to the global food security agenda through exports and value added processing, African agriculture must strive to attain the three integrated goals of dramatically increasing productivity; enhancing the resilience of people and incomes; and as a result achieve lower emission co-benefits. Such a strategic approach to agriculture will deliver higher incomes and more robust companies; drive growth and jobs; improve nutrition and deliver on the true potential of the agriculture sector in Africa.

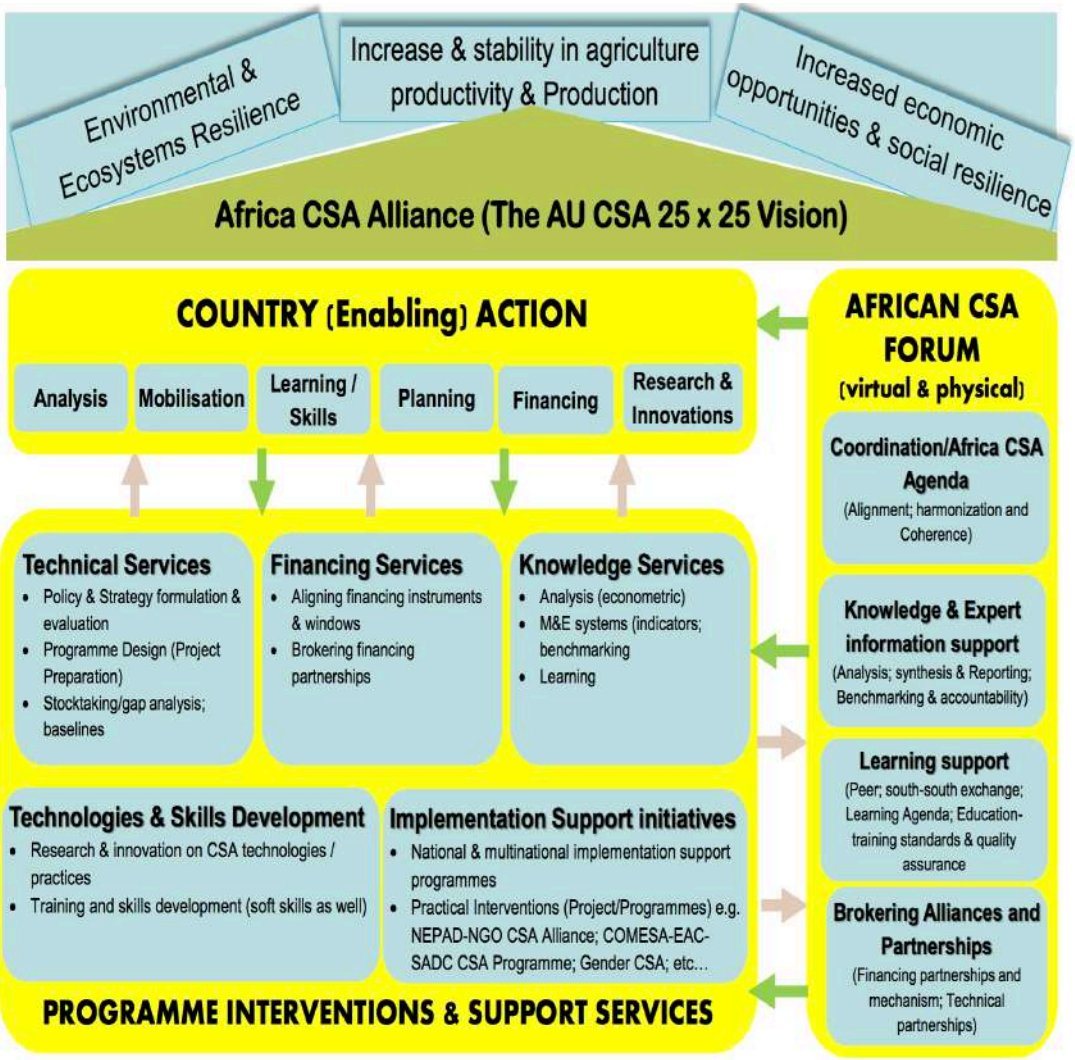
In its 31st African Union Summit (Malabo, June 2014) the Heads of State and Government were clear in their resolve to commit to action on the agriculture-climate change nexus issue. In the Summit Decisions on NEPAD, the Heads of State and Government endorsed the NEPAD programme on agriculture climate change including its components on gender empowerment, intensified support to small-holder farmers and the setup of an African Climate Smart Agriculture (CSA) Coordination Platform as means in pursuit of what was endorsed as the African Union Vision to have at least 25 million farm households more practicing CSA by 2025

Source: www.nepad.org

ACSAA

THE AFRICA CLIMATE SMART AGRICULTURE ALLIANCE (ACSAA): A Strategic framework to catalyse "accelerated scaling-up of CSA in Africa"

The Alliance aims to empower six million smallholder farmers across sub-Saharan Africa in the next five years by promoting the uptake of climate smart agriculture in the region.



Source: www.nepad.org

ACSAA

How ACSAA operates:

- Coordination: through open dialogue and increased alignment and harmonization in the efforts to support the scaling up of CSA in Africa
- Knowledge exchange and learning: facilitate and support intra and inter-action and exchange for peer-to-peer learning, sharing of results and showcasing of lessons learned
- Communication and advocacy: create awareness and advocate for CSA at all levels including national, regional, continental and global levels

Source: www.nepad.org

ACSAA

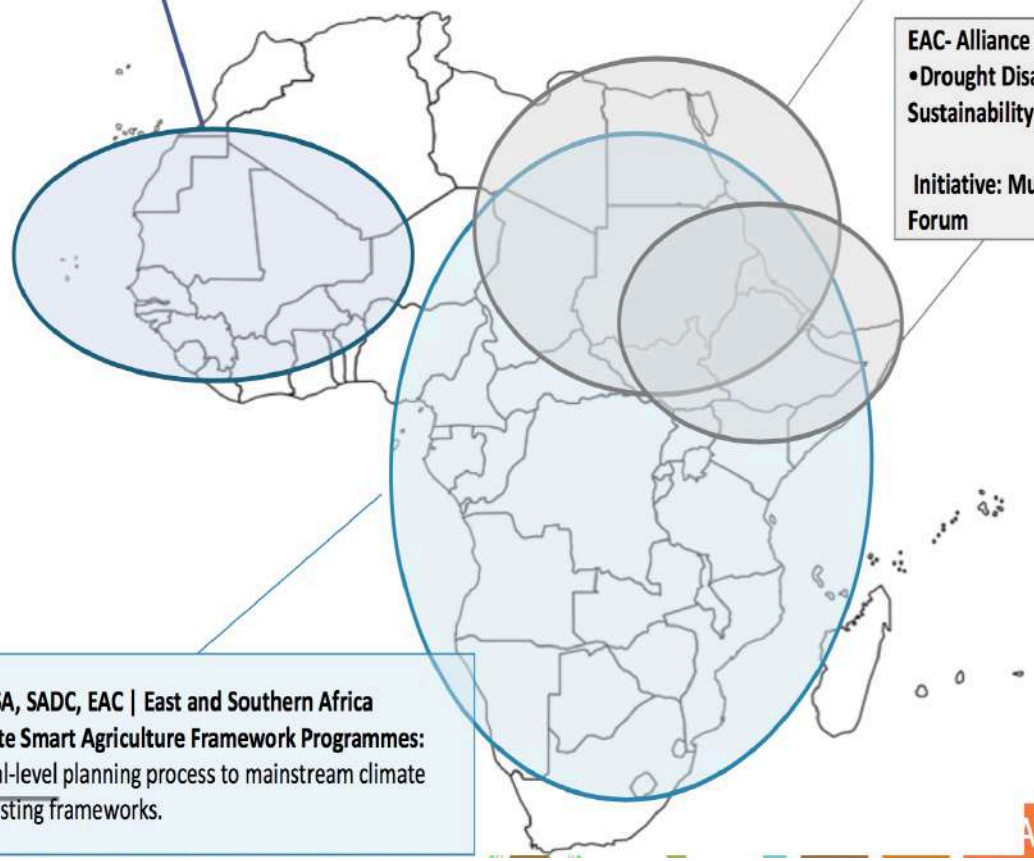
Some Regional Initiatives

ECOWAS | West Africa
- **Intervention Framework on CSA:** Analysis and country-level implementation support
- **West African CSA Alliance:** multi-stakeholder forum

IGAD | Horn of Africa, Nile Valley, African Great Lakes
- **Drought Disaster Resilience Sustainability Initiative:** long-term policies, programmes and interventions on drought resilience

EAC- Alliance
- **Drought Disaster Resilience Sustainability**

Initiative: Multi-stakeholder Forum



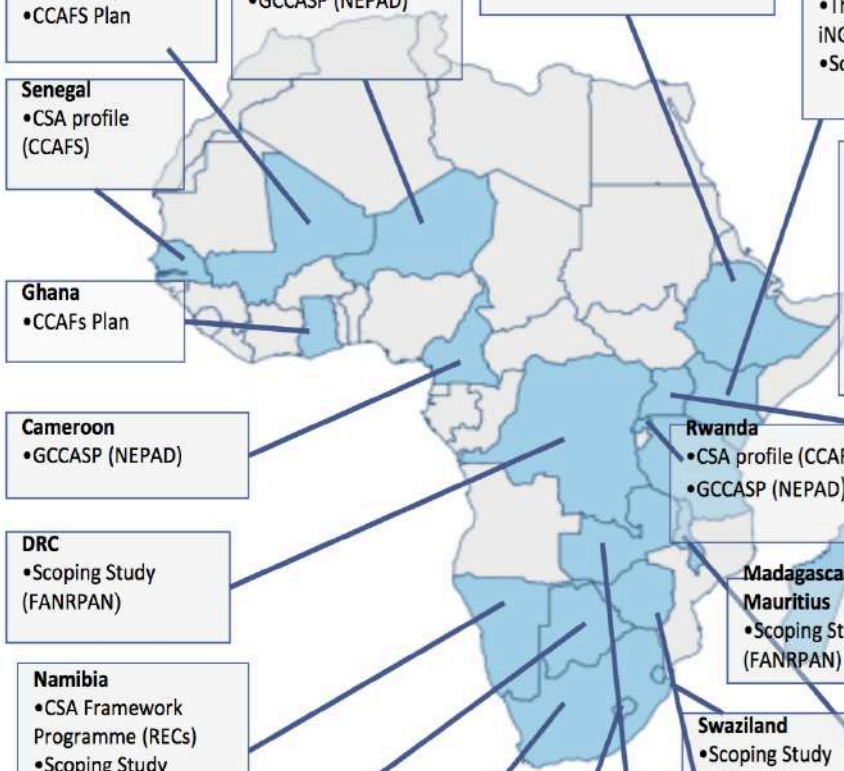
COMESA, SADC, EAC | East and Southern Africa
- **Climate Smart Agriculture Framework Programmes:** national-level planning process to mainstream climate into existing frameworks.

ARTNERSHIPS

Source: www.nepad.org

ACSAA

Some national projects and programmes



Mali
- Scoping Study (FANRPAN)
- CCAFS Plan

Senegal
- CSA profile (CCAFS)

Ghana
- CCAFs Plan

Cameroon
- GCCASP (NEPAD)

DRC
- Scoping Study (FANRPAN)

Namibia
- CSA Framework Programme (RECs)
- Scoping Study (FANRPAN)

Botswana
- CSA Framework Programme (RECs)
- Scoping Study (FANRPAN)

Niger
- CSA profile (CCAFS)
- The Alliance (NEPAD, iNGOs)
- GCCASP (NEPAD)

Ethiopia:
- CSA profile (CCAFS)
- The Alliance (NEPAD, iNGOs)
- GCCASP (NEPAD)

Kenya
- CSA Framework programme
- CSA profile (CCAFS)
- CCAFs Plan
- The Alliance (NEPAD, iNGOs)
- Scoping Study (FANRPAN)

Tanzania
- CSA Framework programme (RECs)
- The Alliance (NEPAD, iNGOs)
- Scoping Study (FANRPAN)

Rwanda
- CSA profile (CCAFS)
- GCCASP (NEPAD)

Uganda
- CSA Framework programme
- CSA profile (CCAFS)
- The Alliance (NEPAD, iNGOs)
- Scoping Study (FANRPAN)

Madagascar & Mauritius
- Scoping Study (FANRPAN)

Swaziland
- Scoping Study (FANRPAN)

Malawi
- GCCASP (NEPAD)
- The Alliance (NEPAD, iNGOS)
- Scoping Study (FANRPAN)
- FAO EPIC

Zimbabwe
- Scoping Study (FANRPAN)

South Africa
- Scoping Study (FANRPAN)

Lesotho
- Scoping Study (FANRPAN)

Zambia
- The Alliance (NEPAD, iNGOs)

NEPAD - TRANSFORMING AFRICA

NEPAD TRANSFORMING AFRICA

PARTNERSHIPS IN SUPPORT OF **CAADP**

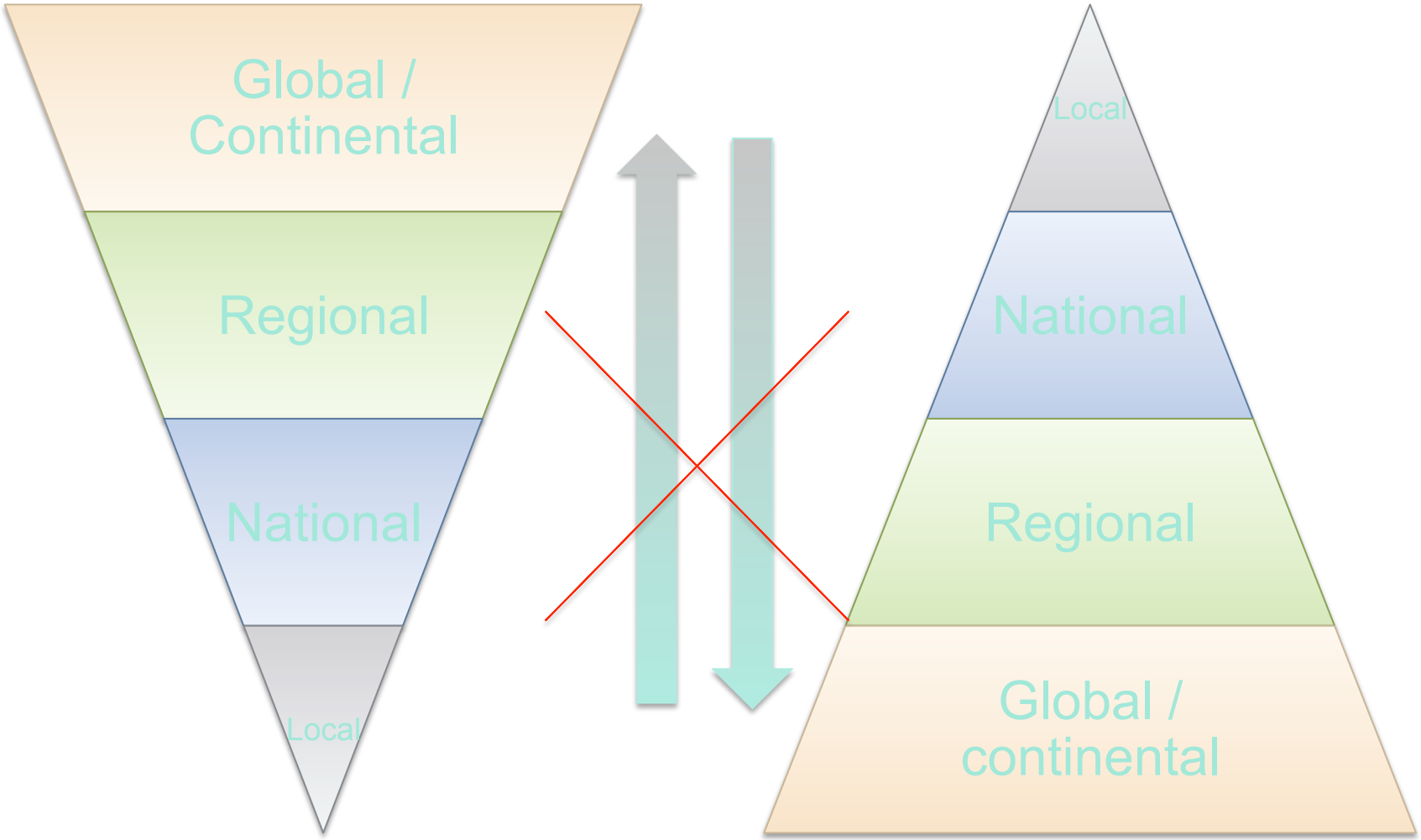
Source: www.nepad.org

The climate (change) policy framework
"Common Sense Agriculture" and programmes that come & go

Countries and communities:

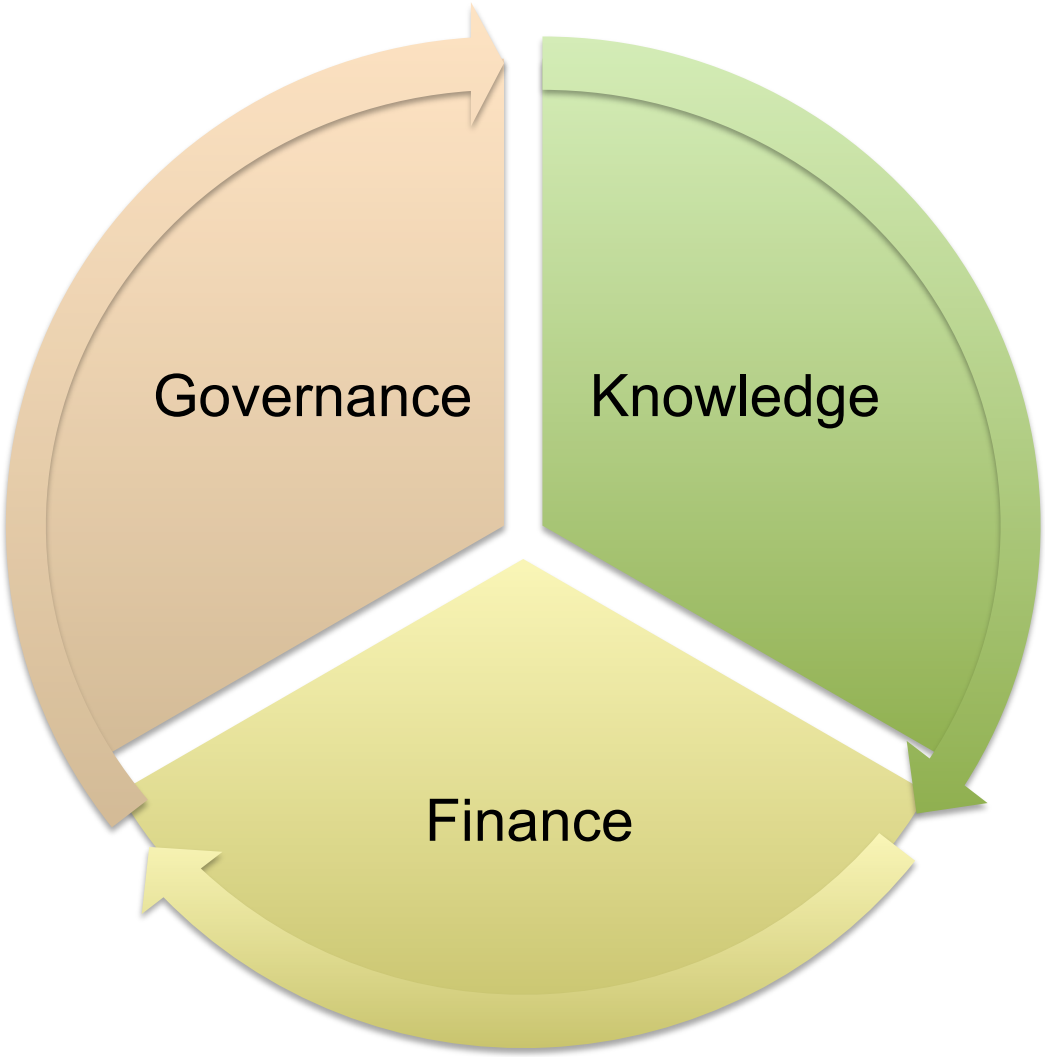
- Are clear on the impact of climate change on livelihoods and development
- Already practice CSA! (traditional knowledge)
- Recognize and have lived the consequences of extreme weather on production/productivity, food security and poverty
- See programmes that come and go, without long-term implementation, results and impact

CSA in Africa: global frameworks, local practices



Source: OECD, 2014.

Challenges to scaling-up CSA



An inclusive, bottom-up approach is needed

Some conclusions

- **Too many policy frameworks?**
- **Disconnect** between policies/interventions, for instance, between agricultural/food security policies & CSA initiatives
- **Top-down approaches** don't take into account local knowledge, challenges and actors
- Policy frameworks in place but inefficient allocation of **resources**
- Need to better integrate **sustainability challenges** in agriculture/food security policy frameworks (nutrition, environmental sustainability, small-holders farmers revenues, etc.)
- Need to better integrate the (different) **private sector** actors in policy-making and encourage PPP (burgeoning food economy)
- Need to address the **policy coherence** issues to address inter-linked challenges (infrastructure, trade, private sector development)
- Need to take into account political economy factors: informality, concentration of power in African food systems, etc.
- Need to take into account **key stressors** such as conflict: conflict-sensitive policies
- **A donor driven agenda?**

More conclusions

- Only a **multi-stakeholder approach** to policies and investments and the coordinated use of different approaches (climate-smart agriculture, agro-ecology, the landscape approach, etc.) and their methods (e.g. multi-cropping techniques, ensuring farmers' access to seeds, etc.) can make an effective transition to sustainable agriculture possible.
- **Participatory approaches** are needed to understand and take into account local conditions and knowledge
- Governments should create the **enabling policy environment**, including providing **financial incentives**, for greener private sector investment and to build complementarities and synergies across such different methods, as a key contribution to addressing in parallel the global food security and climate challenges.
- **Policies should be aligned and coherent** to develop the agricultural sector in a sustainable way, including resilience and short-term food relief policies
- Current policy frameworks should be useful to **knowledge sharing + financial resources** to scale-up successful SA strategies
- **Research and technology** must support the transition towards climate-smart and diversified agro-ecosystems
- **Supporting small and medium enterprises (SMEs)** in this transition is especially relevant, as large companies and multinationals find it easier to move to a greener business model while SMEs have shorter term profitability objectives and often find green investment too costly.

The nexus between Food and Nutrition Security and Migration

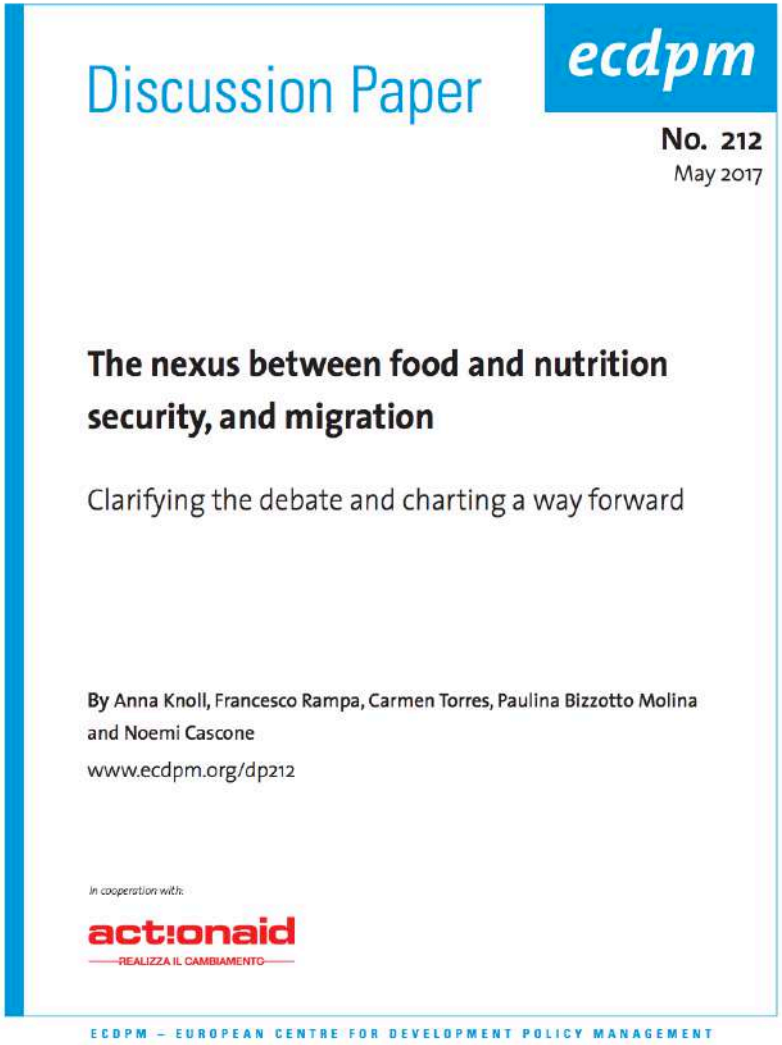
Changing the migration discourse and resulting allocation of resources

A presentation based on DP 212, May 2017

The nexus between food and nutrition
security, and migration
Clarifying the debate and charting a way forward

By Anna Knoll, Francesco Rampa, Carmen Torres, et al.

www.ecdpm.org/dp212


Discussion Paper

ecdpm

No. 212
May 2017

The nexus between food and nutrition security, and migration

Clarifying the debate and charting a way forward

By Anna Knoll, Francesco Rampa, Carmen Torres, Paulina Bizzotto Molina and Noemi Cascone
www.ecdpm.org/dp212

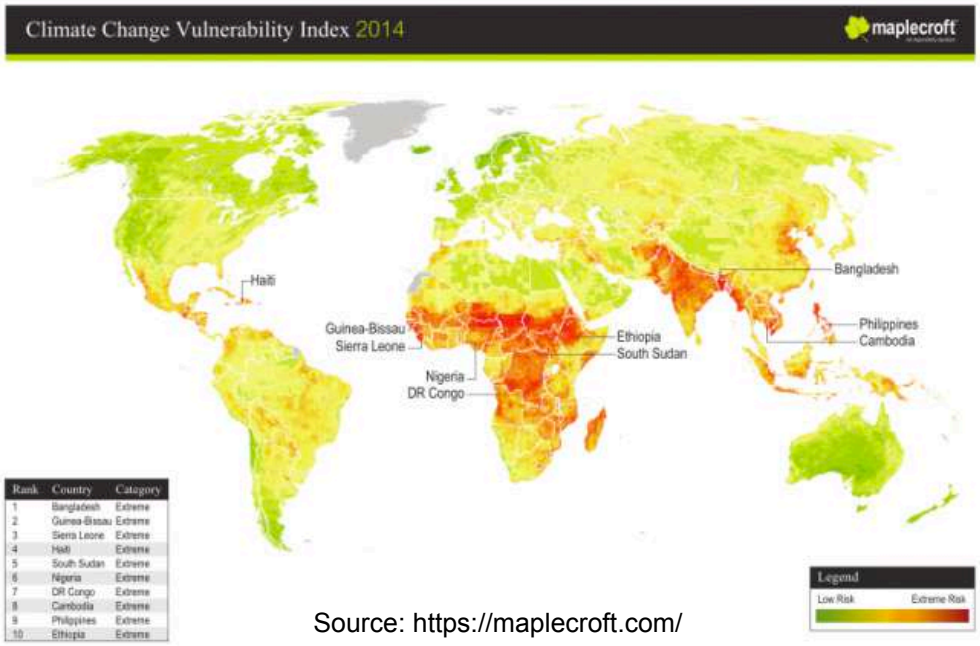
In cooperation with:

actionaid
REALIZZA IL CAMBIAMENTO

ECDPM – EUROPEAN CENTRE FOR DEVELOPMENT POLICY MANAGEMENT

Climate change (CC), agriculture and migration

- CC will **disproportionately impact agriculture** and FNS in Africa
- CC has devastating effects on vulnerable communities in rural areas (smallholder family farmers, fishers and pastoralists) **that depend on agriculture for their livelihoods**



Rank	Country	Category
1	Bangladesh	Extreme
2	Guinea-Bissau	Extreme
3	Sierra Leone	Extreme
4	Haiti	Extreme
5	South Sudan	Extreme
6	Nigeria	Extreme
7	DR Congo	Extreme
8	Cambodia	Extreme
9	Philippines	Extreme
10	Ethiopia	Extreme

Source: https://maplecroft.com/

Climate change (CC), agriculture and migration

- CC and extreme weather events can lead to the depletion of natural resources and environmental degradation, decreased land availability for agriculture, failed crops, ailing livestock and localized conflicts over resources that in turn can **motivate migration as a livelihood diversification strategy**.

- CC and FN insecurity mostly drive **internal migration** (permanent, temporal, circular,…). Almost all displacement and distress migration due to CC occurs **within developing regions** (Horn of Africa, Lake Chad and Nile Basin, etc.)

- Migration can represent a 'transformational' adaptation to environmental change, and in many cases is an extremely effective way to **diversify livelihood strategies and build long-term resilience.**

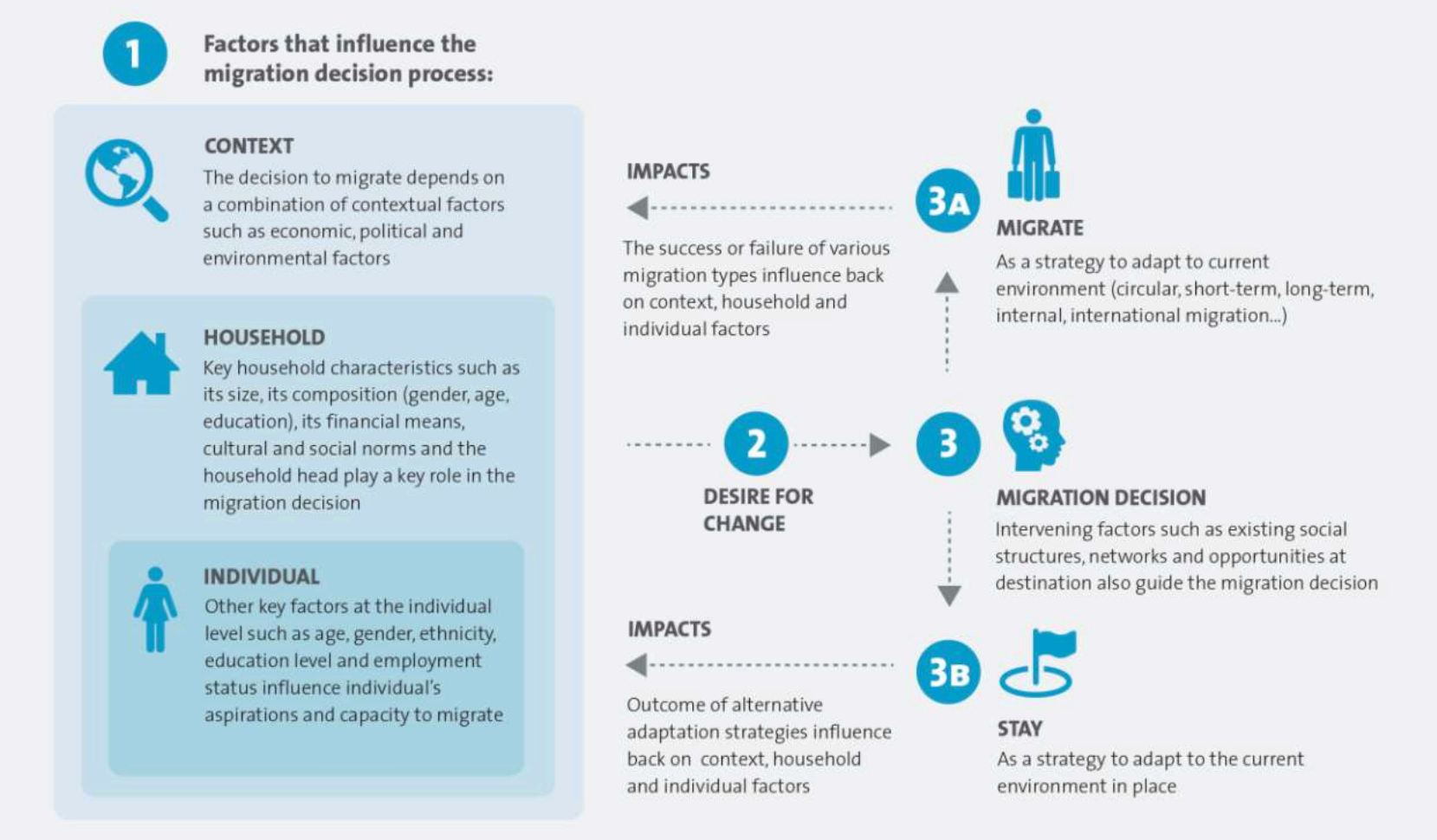
Climate change (CC), agriculture and migration

"The rhetoric around migration has changed but the trends and numbers remain fairly the same than in the past. Migration is a normal and predictable phenomenon. Hence we're failing miserably at dealing with a problem that's perfectly manageable. As a consequence, despite the situation being relatively the same, more and more people are dying at the borders because of the absence of legal routes."

Marta Foresti (ODI)

- **A lack of coherent development policies lead to humanitarian crisis**

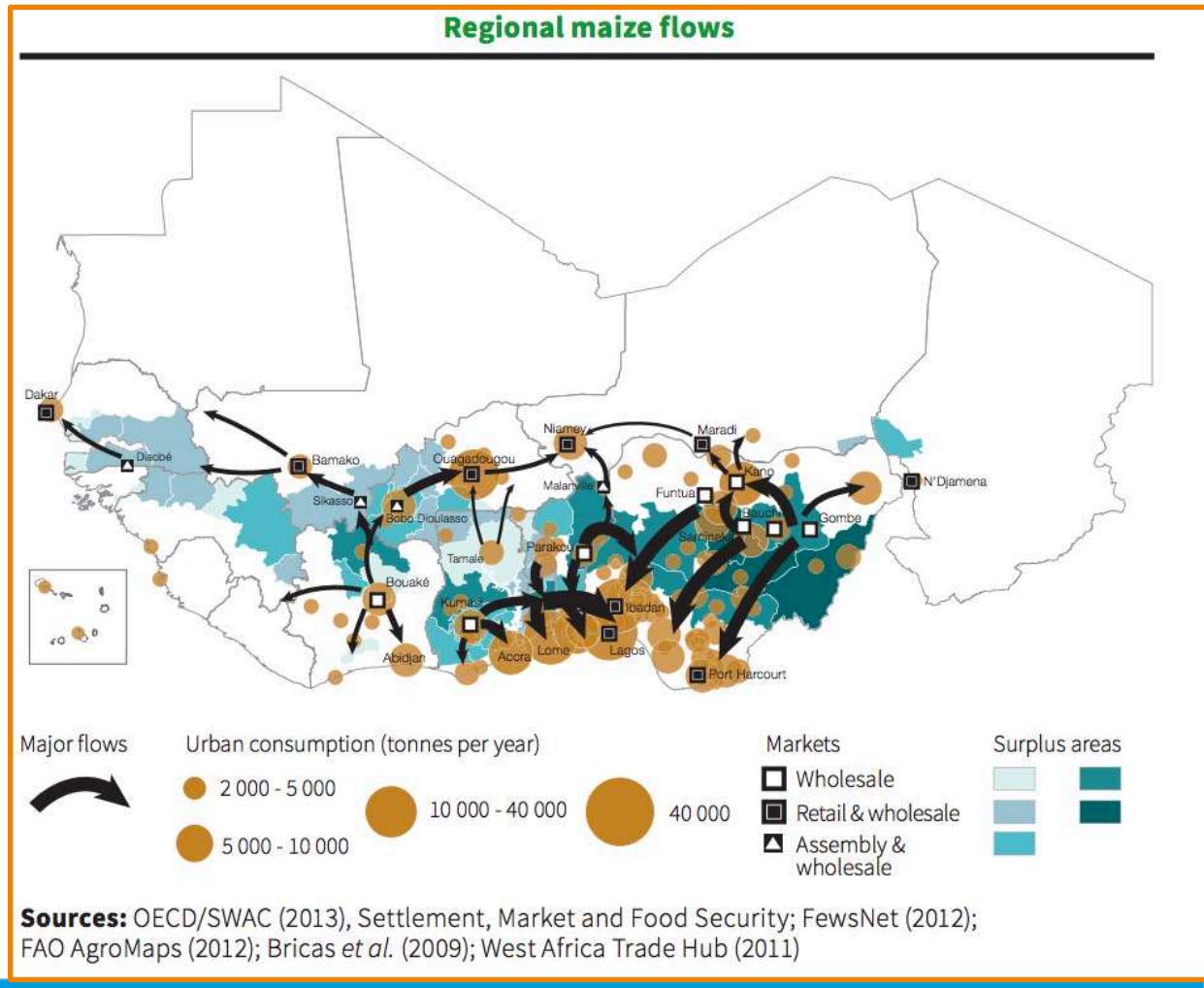
The decision to migrate depends on a variety of multi-layered factors. It is rarely possible to distinguish individuals for whom environmental factors are the sole driver ('environmental migrants')



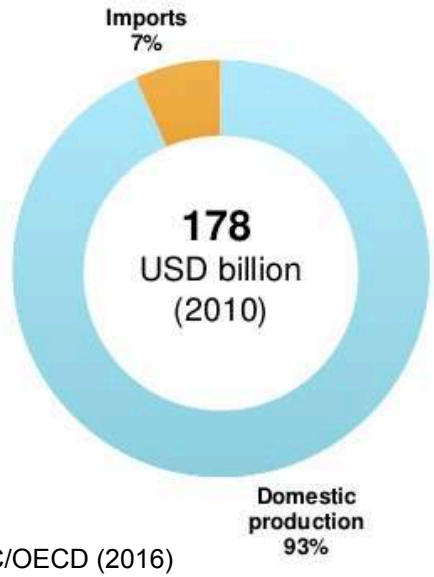
Regional mobility also **creates opportunities for economic growth, job creation and local development.**

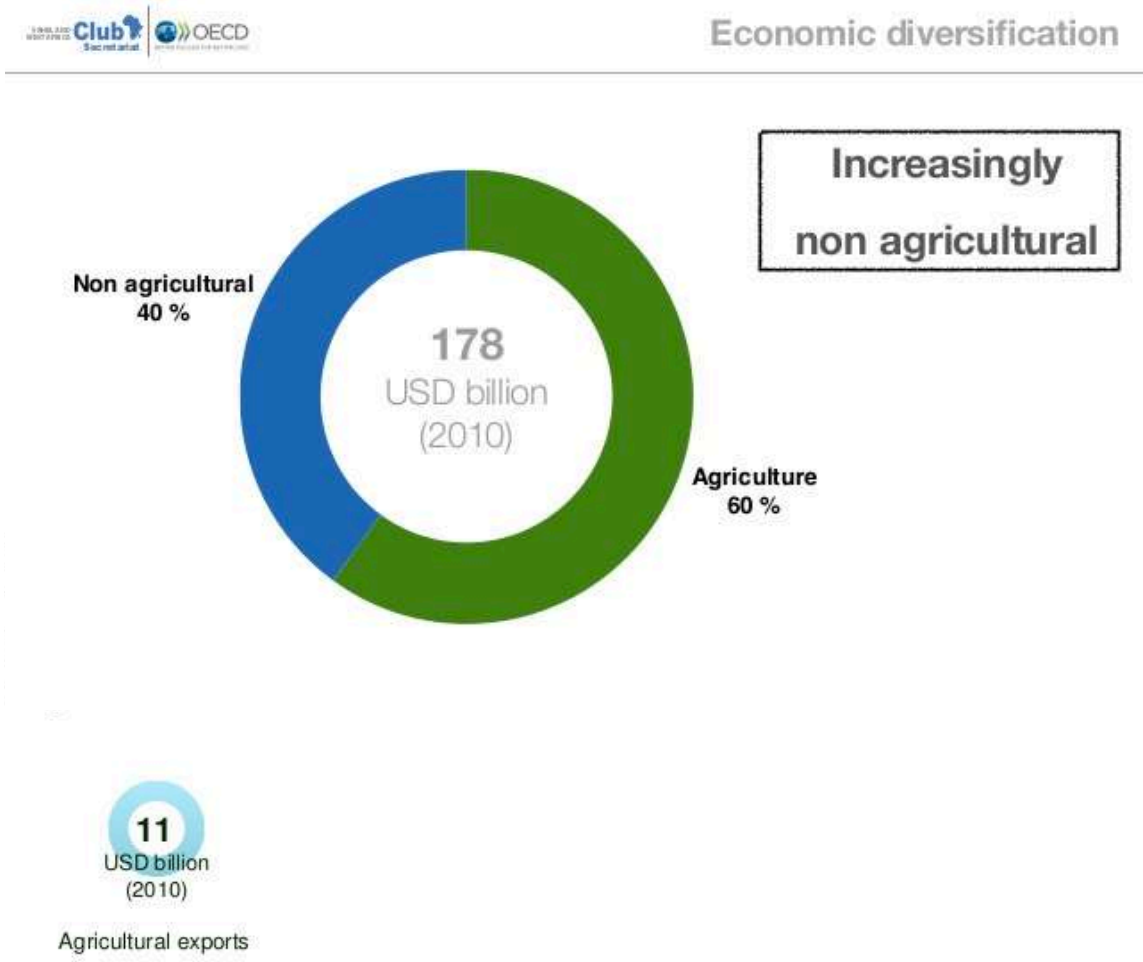
For example, West Africans are among the most mobile populations in the world: intra-regional mobility is almost seven times greater than the volume of migration from West Africa to the rest of the world. West African migration forms the basis of strong social and business networks, and these networks contribute to the regional integration of agribusiness markets such as the maize market.

Source: SWAC/OECD (2013)



In West Africa, domestic food economy is 16x bigger than agricultural export sector and **increasingly non-agricultural**





Source: SWAC/OECD (2016)

A “Sustainable Food Systems” approach

- It is important to **take a broader “development approach”** -> i.e., go beyond simplistic interpretation: “investing in/adapting agriculture + reducing climate risks + rural development will reduce migration”)

- We need a new narrative on the **development benefits of migration**, and **understand mobility as a pillar of sustainable food systems**, increased resilience, and inclusive territorial development

- Adopting a development approach means **increasing the options available to individuals to allow them to pursue better agricultural, rural or urban livelihood opportunities,** with safe and regular migration as one of those options + enabling many options

A “Sustainable Food Systems” approach

Building blocks

1. Adopting a **sustainable food systems approach to agricultural and rural development** that is climate, migration, gender, age and nutrition sensitive: everyone, local, national and international actors, should work together **beyond agriculture and rural development,** having as central overarching goal **creating sustainable food systems (SFS).**

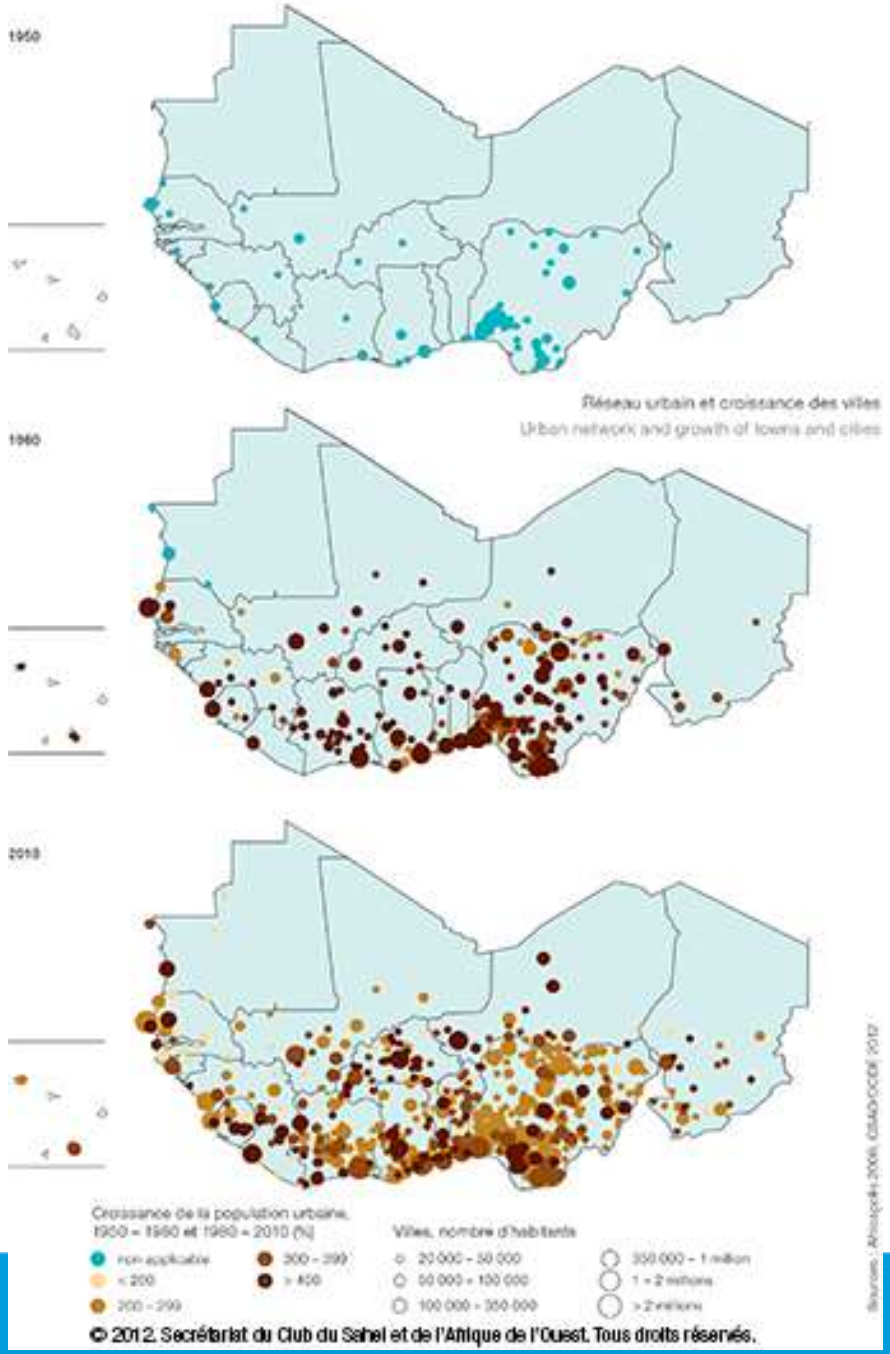
2. Concentrating on inclusive development along the value chains, **focusing on smallholder farmers, SME and small (informal) service providers** (taking into account the diversity between households and between small entrepreneurs):

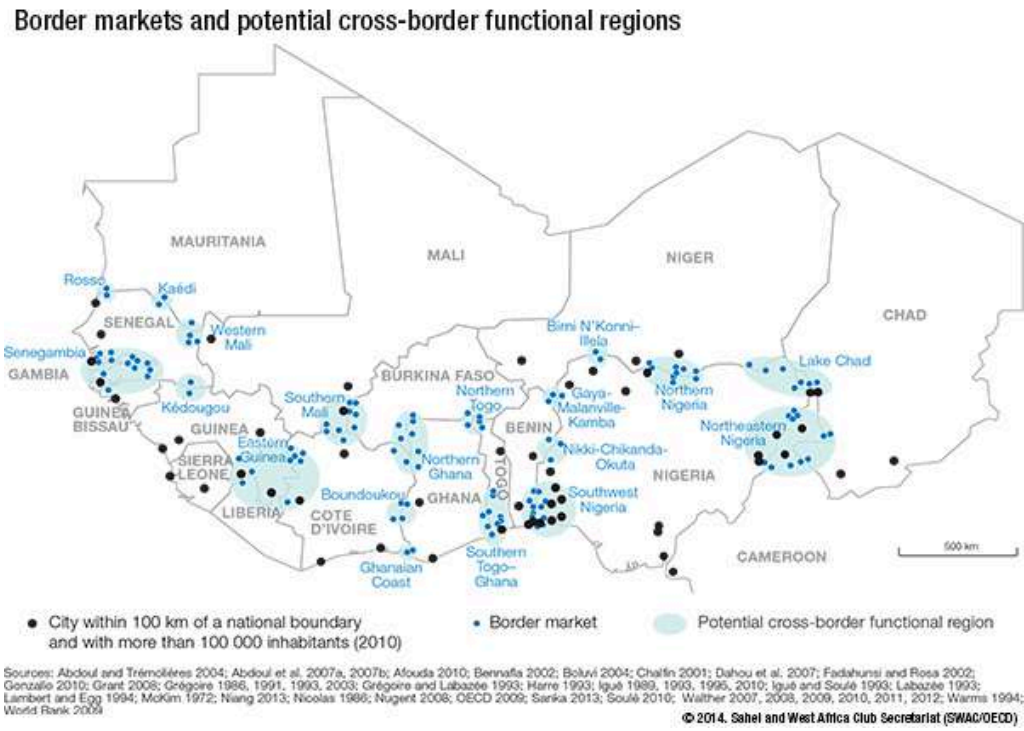
⇒ <u>From an actor perspective</u>, more centrality should be given to smallholder farmers, SME and small service providers and **their (capacity to) transformation into entrepreneurs**. It is their share within total population, including poor population, the **sustainability of their farming and trading practices *vis-à-vis* the environment**, their growth potential and their proximity to expanding urban areas that should make them the protagonists of SFS and private sector development

3. Adopt a **territorial (and regional) food system approach**:

⇒ From a geographical perspective, SFS requires inclusive territorial development. The full integration of territories along the urban-rural continuum, linking all the actors in the food system, from producers to consumers, through both better infrastructure and information systems, enables in particular smallholders and small operators to **better supply urban and regional demand, thus taking advantage of burgeoning African food economies**.

The network of cities dictates the spatial organisation of markets by serving as the connective tissue between rural and urban areas





Source: SWAC/OECD (2016)

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- Adopting a territorial food systems approach also means **putting a stronger focus on the increasing climate vulnerability and food and nutrition insecurity in urban areas**, resulting from rural-urban and international migration dynamics

- Strengthening the ability of smallholders, SME and small service providers to invest in human and financial capital to create more competitive and sustainable farms will lead towards **more profitable off-farm activities** as well as the **provision of services within the full continuum of the whole food economy**.

4. Invest in **infrastructure**, **especially connectivity and financial infrastructure**:

⇒ <u>From a financing perspective</u>, priority should be given to **accessing markets and credit**. Smallholders and informal operators such as small traders are major investors in the food economy but their access to markets is limited due to **poor rural road infrastructure**

Better connectivity and financial infrastructure can facilitate the mobility between rural and urban areas, which plays a key role for livelihood diversification and increased resilience (non-farm income sources are increasing and crucial to the resilience of rural households)

5. Adopt an **inclusive and multi-level governance approach**:

⇒ From a process perspective, not only incentives and institutional mechanisms should be established to **overcome policy silos** between migration, development, climate, agriculture and FNS; local authorities and **organisations representing smallholders, SME and small service providers should be central to the governance arrangements** that could promote and facilitate the transition to more SFS. For instance, the promotion **of community participation** in the selection and implementation of local infrastructure development projects like roads and market centres, are key for an inclusive territorial approach

Policy coherence for Food Security

More coherent development policies to avoid humanitarian crises

A presentation based on DP 215, May 2017

Policy coherence for agricultural development and food security
Burkina Faso case study

By Fabien Tondel, Carmen Torres, et al.
www.ecdpm.org/dp215

Document de réflexion

ecdpm

No. 215
Juillet 2017

Étude sur la cohérence des politiques pour le développement agricole et la sécurité alimentaire

Le cas de l'agriculture et du commerce au Burkina Faso

Fabien Tondel, Carmen Torres, Sayouba Ouédraogo, Didier Zoungrana, Boureima Sawadogo et Somlanare Romuald Kinda
www.ecdpm.org/dp215fr

Un projet soutenu par :
Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

ECDPM – EUROPEAN CENTRE FOR DEVELOPMENT POLICY MANAGEMENT

Policy Coherence for Development (PCD): Concepts

- **Non-development cooperation policies of OECD countries** (e.g., agriculture, trade, international investment, tax, science and technology, migration, etc.) can have (negative/positive) spillover effects on developing countries
- Those effects can be **incoherent with development objectives**, whether they are the objectives of a particular developing country, a region, developing countries as a whole, or the objectives of development cooperation policies of OECD countries
- **Different dimensions of development**: economic growth, poverty reduction, food security, health, human development, environmental sustainability, etc.

Policy Coherence for Development: 4 "(Un)famous" case studies

Food security: While the EU is the world's major development actor on food security, some of its other policies are still criticised as harmful to global food security and agricultural development.

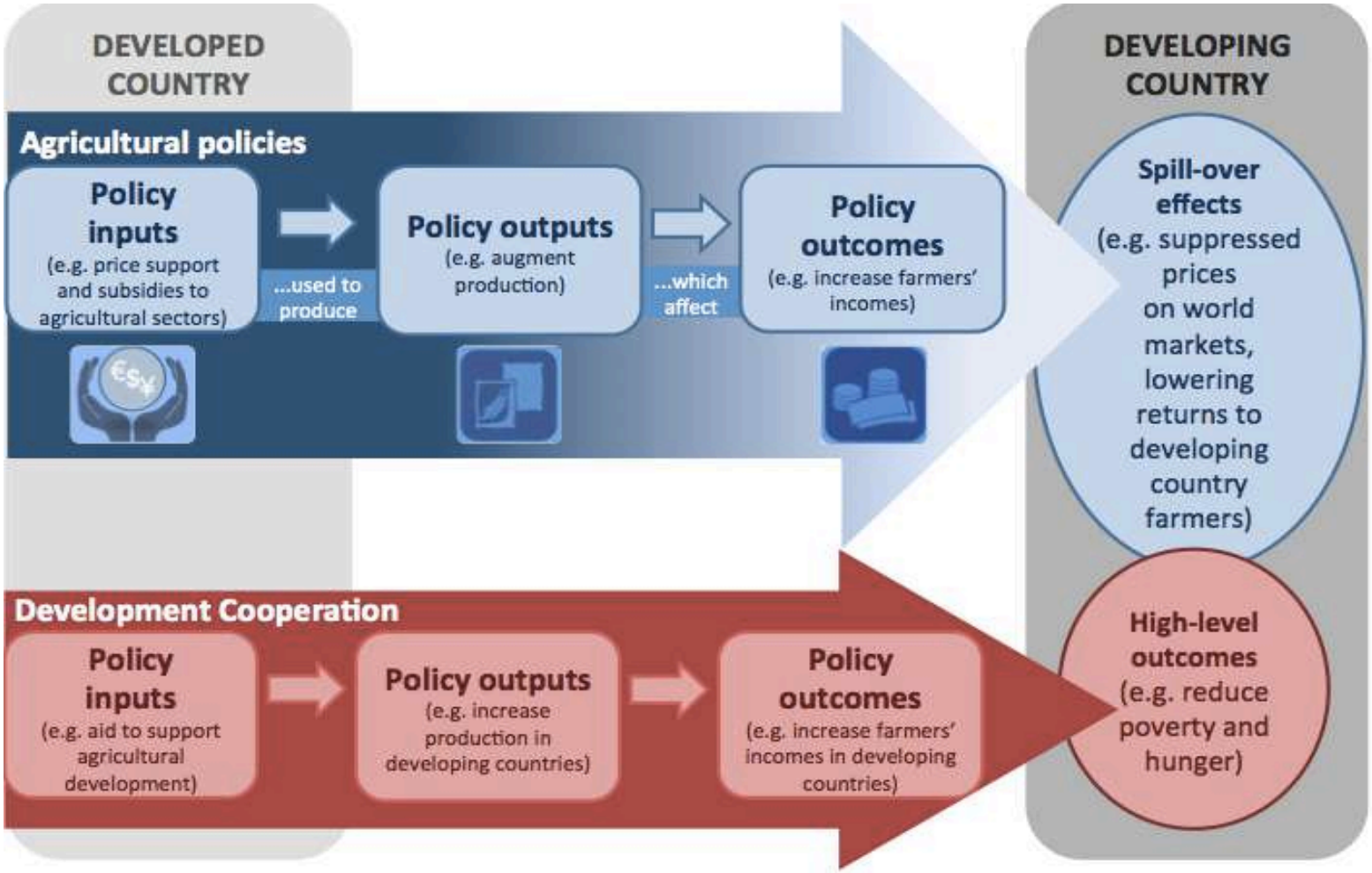
Arms exports: incoherence between European humanitarian aid in conflict zones and European arms exports. Regardless of the EU Common Position on arms, export controls contains different criteria for licensing decisions on the export of conventional arms, including respect for human rights in the country of final destination and respect by that country of international humanitarian law. However, the EU is reproached for not applying these criteria consistently.

Financial flows: It has also been widely stressed that the EU needs to take more seriously its role in fighting illicit financial flows from developing countries through holding its transnational companies to account or strengthening transparency and reporting. The "Luxleaks revelations" in 2014, revealed how hundreds of global companies had secured secret tax deals with Luxembourg, allowing them to save billions of euros in taxes.
**UNCTAD has estimated that developing countries lose at least €100 billion per year due to corporate tax avoidance.

Migration: A timely and heavily debated issue for policy coherence is migration. Evidence suggests that the movement of people from the poorest countries into Europe has become increasingly restricted while, at the same time, EU countries sent a total of €56.1 billion in aid in 2014 to address global poverty. International migration is the most effective method of poverty reduction we know of; far more transformational for the migrants and their family than aid could ever hope to be.

Source: ECDPM (2016)

PCD Concept - The case of Food Security



Source: OECD

From PCD to PCSD: a new development framework

8 Goals; 18 Targets;
48 indicators

17 Goals; 169 Targets;
300+ indicators

PCSD: what is different this time?

- Transformative
- Universal
- Integrated: 3 Dimensions of Sustainability

Explicit PCSD target:

SDG Target 17.14 ***Enhance Policy Coherence for Sustainable Development***

International context of the study

- Impacts of OECD farm & trade policies on agriculture & food security in developing countries: domestic support, market access & export subsidies (1980s-1990s, low agricultural prices)
- 2008 food price crisis-market volatility (due in part to policy responses), lack of investment in agriculture in LDCs & unstable countries, lack of resilience
- 2000s-2010s-foreign & local investments (large-scale land acquisitions & farm operations, retail sector), dysfunctional regional food markets, sustainability issues (climate change, land, water)
- Mitigating incoherencies & adapting/exploiting synergies

National context: Burkina Faso

- Sahelian country
- LDC
- High levels of poverty (mainly rural), and chronic malnutrition levels
- Low productivity of agricultural sector + weak organization of value chains actors => Deepening gap between national food demand and supply, leading to increased food imports
- Intra-regional trade below potential, hampered by NTBT
- CAADP 10% budget allocation, but focused on certain crops (cotton, rice, etc.) and certain areas (irrigation infrastructure)

Burkina Faso food markets

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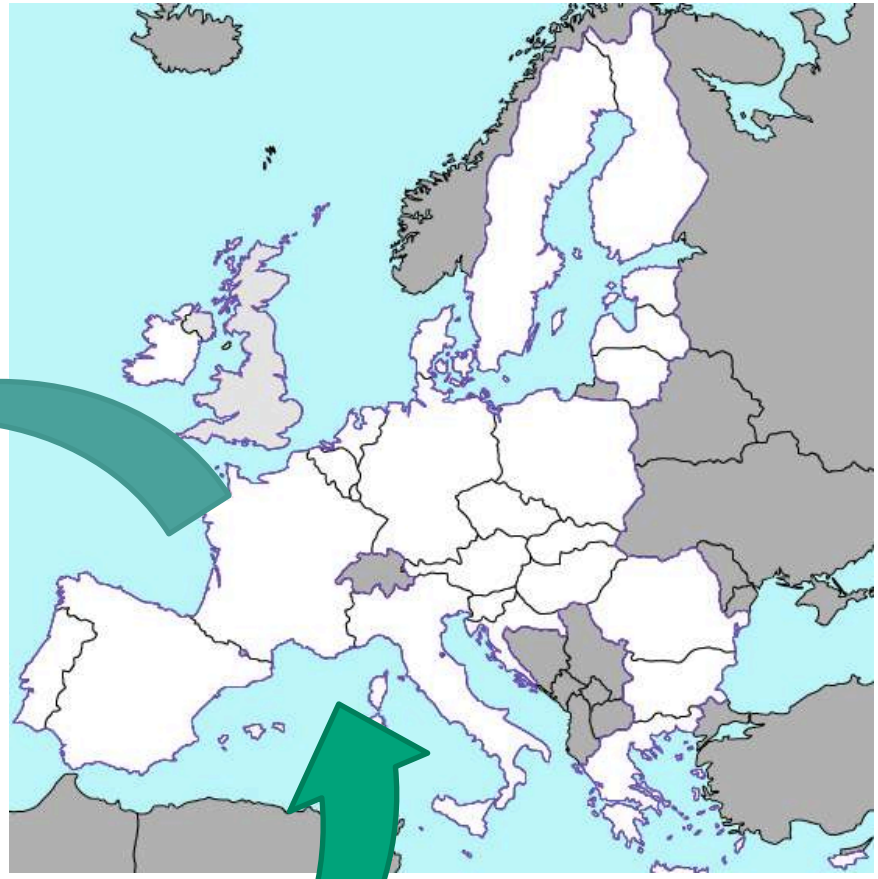
Trade flows

Drugs, refined oil, machinery, telecommunication equipment, food products (dairy, tomato paste/sauce, etc.), wheat



Gold, cotton, fruits & nuts (cashew nuts), oilseeds (shea butter), vegetables

Burkina Faso study: Approach

- What are the linkages between agricultural, food & trade policies? Are they coherent? ← issue/nexus-based approach
- National, regional and international (European) levels (→ PCD to PCSD?)
- Linkages are context-specific (2015 FAO report on trade & food security)
- DAC methodology for assessing policies/programmes

➢ Multi-stakeholder approach (government, business, CSOs, science) → knowledge uptake and long-term partnership promotion

➢ Indicators at different levels of the policy cycle: relevance of policy objectives; institutional arrangements; mobilization of resource; effectiveness and efficiency → inputs in PCD monitoring systems

➢ Existing policy/programme assessments (meta-analysis (complexity)), data, interviews and multi-stakeholder consultations

Policy coherence at the national level

National rural development programme (PNSR) strengthened coherence among agricultural/rural sub-sector…

… But poorly defined Strategy for agricultural value chains within the Ministry of Agriculture, with little linkage to the industrial policy of Ministry of Industry and Commerce as well as to its export and investment policies

New sectoral approach, with inter-sectoral coordination structure (*Secretariat Permanent de la Coordination des Politiques Sectorielles Agricoles*), and programme-based budget (UEMOA guideline)…

… But institutional fragmentation (different ministries in charge of related sub-sectors) and instability, ambiguity and multiplicity of legal and regulatory frameworks

… Lack of sub-sectoral regulatory bodies

… Lack of private sector involvement in policy planning & implementation

Policy coherence at the national level

Public agricultural expenditures consistently above 10% of public budget (CAADP target)...

… But inadequate allocation (with most public resources going to cotton, rice & large irrigation schemes and very little to other key sub-sectors like livestock, implementation units of the Ministry, and extension services)

… Poor execution of public investments (partial, delayed, with public financial management & public procurement problems)

Heavy dependency on development partners (⅔ of public agricultural investments)…

… Contributing to a mosaic of donor-funded projects and the lack of a systemic, consistent and sustained approach

Policy coherence at the regional level

- Incoherencies between regional industrial and trade policies and regional agricultural policies
  - Different agro-food value chains
  - ECOWAS Common external tariff (CET) too low for strategic sectors (livestock products, rice), exemptions
  - ECOWAS Trade Liberalization Scheme (ETLS) poorly implemented, fragmentation of the regional market (protectionist national policies, rent seeking)
- Lack of coordination between regional trade facilitation policies & regional agricultural policies
  - Still an excessive emphasis on extra-regional exports
- Some progress: coherence between ECOWAS & UEMOA agricultural policies (strategic agro-food value chains), same national policy frameworks for domestication, regional inter-sectoral coordination structures (although "institutional & programmatic inflation" is also an issue at the regional level)

Policy coherence at the European level

- The Economic Partnership Agreement (EPA) will lead to a greater opening of the regional market…

… Resulting in an increase in imports from the EU and a *relative* displacement of intra-regional imports (milk powder, some meat products, processed food products, etc.) (Burkina Faso already has a trade deficit)…

… But this increase is estimated to be limited compared to current imports and limited compared regional agro-food market growth projections

- Opportunities to import inputs and equipment at a lower cost
- Fiscal revenue losses (a more serious issue perhaps-current budget deficit, already high taxes for agro-food value chains, public investment gap)

Policy coherence at the European level

- Improved alignment of EU agricultural & rural development assistance with national priorities & strategies (PNSR)
- Enhanced coordination between Government and European partners (SCADD, PNSR)
- But EU support to the agricultural and industrial sectors has not matched (1) the weight of the agricultural economy in the overall economy; (2) the challenges and opportunities linked to (a) the growth of local and regional agro-food markets and (b) the preferential access to the EU market and the opening of the regional market associated with the EPA
- Lack of coordination between EU regional and national programmes (EDF)
- Aid-for-trade still benefit in large part extra-regional trade
- Support to private sector development not adequately targeted to **local and regional** agro-food value chains (in particular, quality and food safety)-too much support goes to extra-regionally export-oriented value chains (e.g., Intra-ACP programmes like COLEACP)
- Support to research & innovation not adequately targeted to private sector dynamics

Implications & next steps

- Need to strengthen inter-sectoral coordination (what are the incentives?); role of EU budget support & AfT in fostering domestic policy coherence & European donor coordination? What about DG DEVCO-DG TRADE-DG AGRI-DG RTD coordination?
- Problem of EU instrument-driven policy; need to do better on PSD support, have more flexibility & multi-stakeholder approaches
- CAADP has a role to play in inter-sectoral coordination (weak record on inter-sectoral coordination); e.g., ECOWAP in search of better coherence → the regional level is important for coherence (post-Cotonou regime regionalisation)
- Role of the private sector and CSOs at national and regional levels

Implications & next steps

- PCD outcomes depend on PC (PCSD?) in partner countries (for good or bad)

  Case of EU in particular, with budget support

  Easier to address policy incoherencies if they are joint issues, no need to debate PCD vs PCSD → "PC for food security"?

- Need to work more on sustainability issues (agriculture = 1/3 GHG emissions, 1/3 freshwater consumption, changing global agro-climatic conditions, etc.)
- PCD generally emphasizes conflicts of interest; need to also look at win-win possibilities

Wrapping-up

What does it mean for you to *"address the root causes of vulnerability, fragility, conflict and migration"*, to avoid humanitarian crisis?

What policy/governance changes do we need?

Thank you!

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