



Degradation of land, desertification drought and poverty : a global risk ?

Patrice BURGER

Executive director - CARI –

Centre d'actions et de réalisations internationales – France

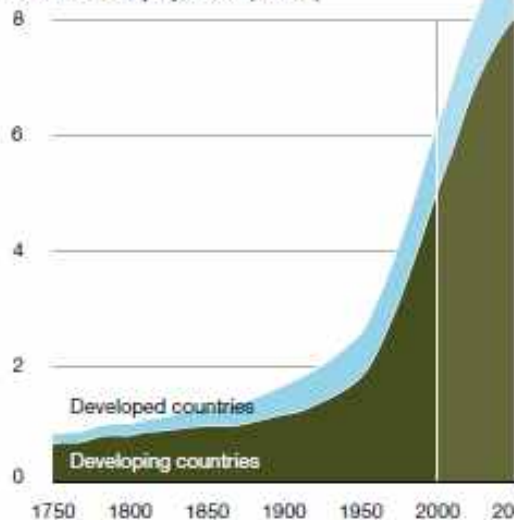
on behalf and with the support of the above mentioned networks

DESIRE

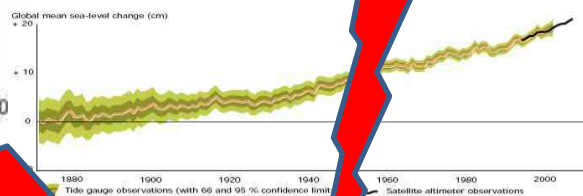
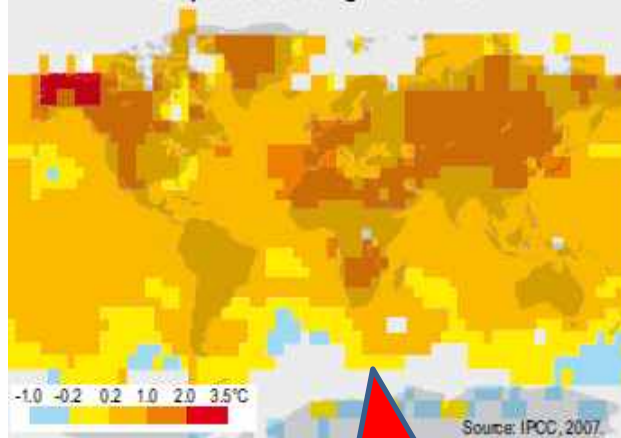


eniD

Global population, estimates and projections (billions)

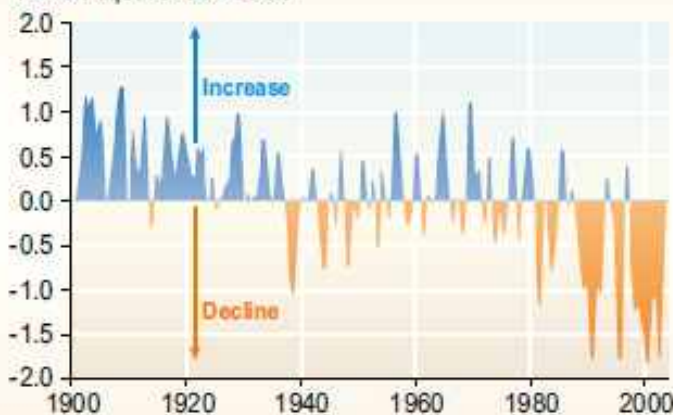


Temperature change 1970-2004

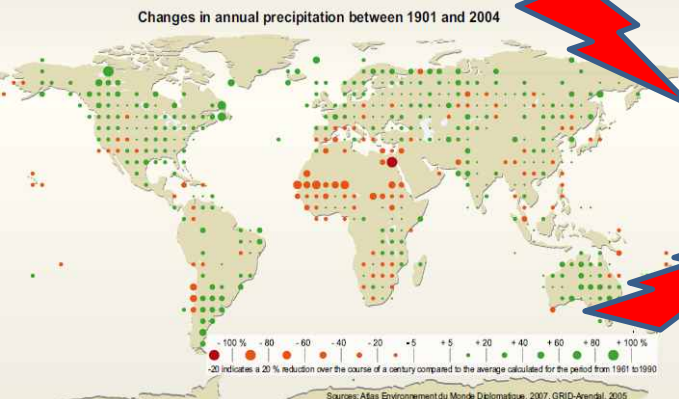


Decline in permafrost

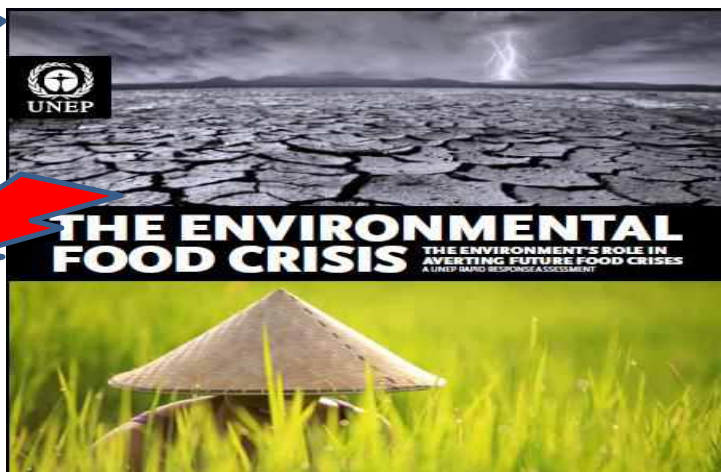
Deviation in the extent of frozen ground in the Northern hemisphere
Million square kilometres



Changes in annual precipitation between 1901 and 2004



LAND

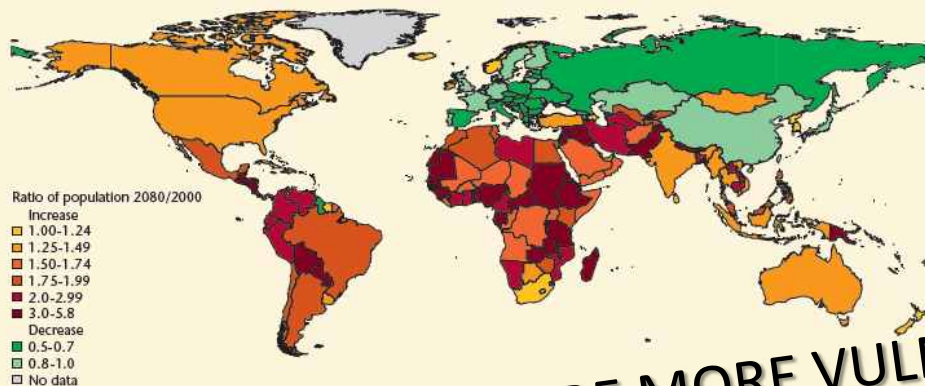


TRENDS OF A CHANGING WORLD!

Global Risk Factors 2010 - 2030

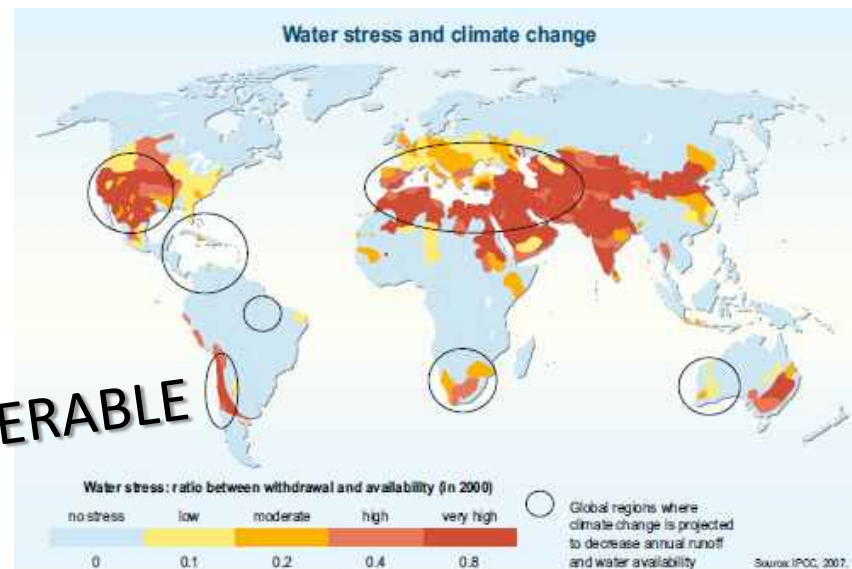
PDF compression, OCR, web optimization using a watermarked evaluation copy of CVISION PDFCompressor

Map 2.1 Expected areas of population growth and decline, 2000-2080

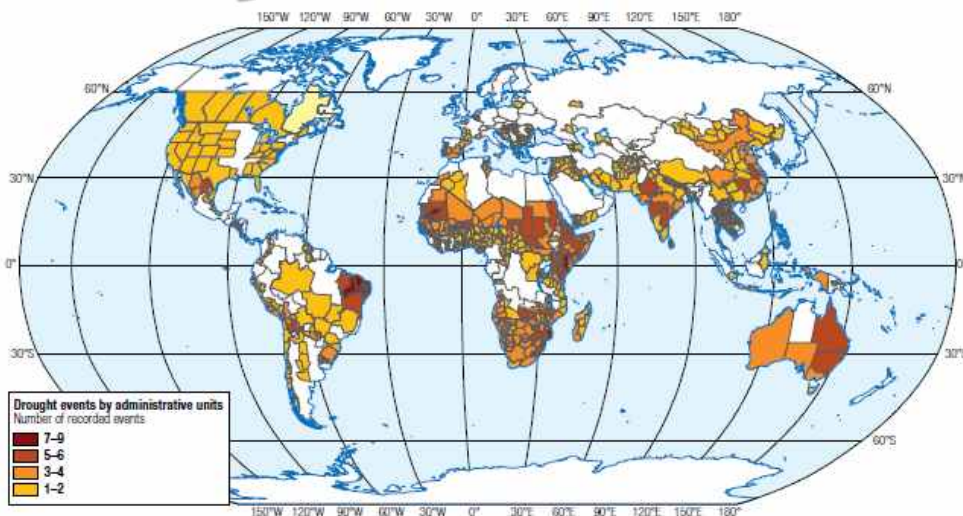


Source: Lutz, Sanderson, and Scherbov 2008

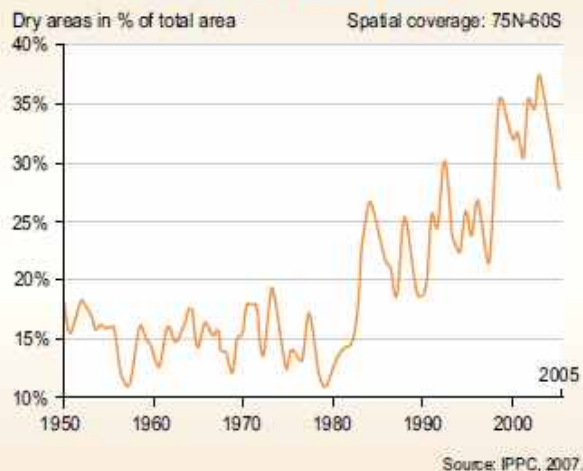
DRYLANDS ARE MORE VULNERABLE



41% of the land are drylands ; 10 to 20 % are highly degraded
Asia is the most affected 1.4 billion **Africa has 74 % of its land affected** North America, Australia and Europe are also affected
38 % of the world population (2.3 billion) live in this areas
250 millions are directly affected by consequences of desertification

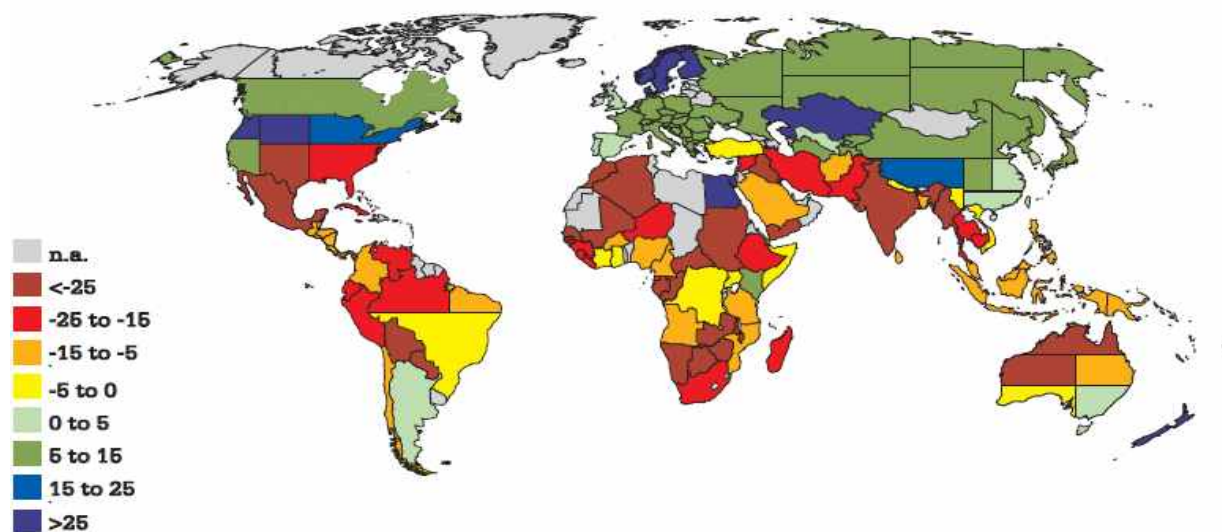


Increase in dry areas globally



DRYLANDS AREAS ARE INCREASING

Projected changes in per cent in agricultural productivity by 2080 due to climate change



WHILE THEIR AGRICULTURE PRODUCTIVITY DECLINES...

Natural CAUSES

- Hot and dry climate conditions
- Drought
- Low top soil
- Low soil cover

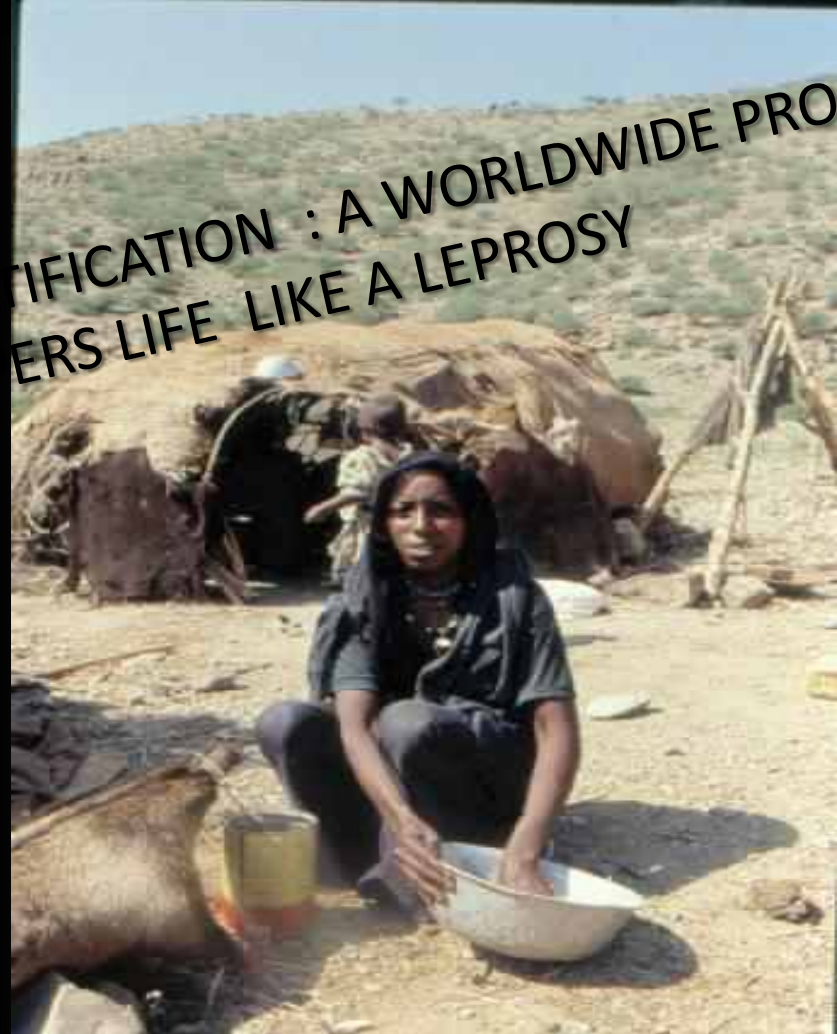
Human CAUSES according to FAO

- wrong landmanagement 35%,
- deforestation (29.5 %)
- overexploitation/overgrazing 35 %,
- other causes...(1%)

- Degrade the land structure and life
- reduce the fertility and loose top soil
- destroy the vegetable cover ,
- modify the cycle of water,
- reduce vegetal and animal biodiversity

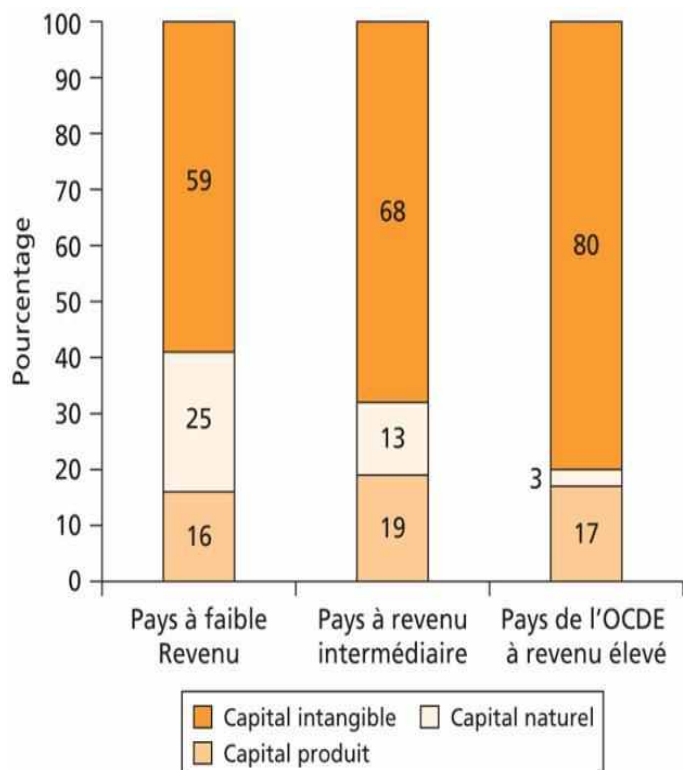
**Desertification reduce ecosystem services,
AND
undermines the living conditions of their inhabitants ,**

DESERTIFICATION : A WORLDWIDE PROCESS
HAMPERS LIFE LIKE A LEPROSY

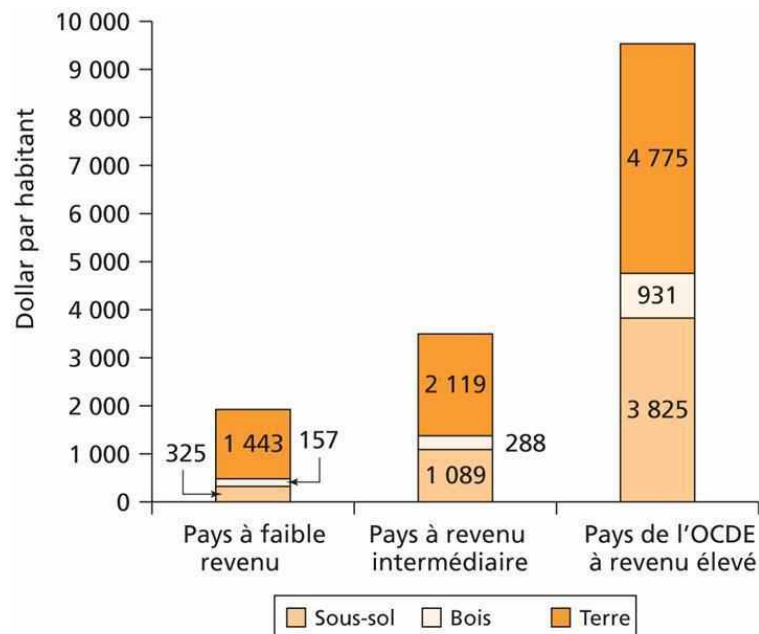


According to the world bank ...

While natural resources are the most part of the capital of the nations ...



Land is the highest part of the capital in the poorest countries



Source : Banque mondiale 2006.

Source : Banque mondiale 2006.

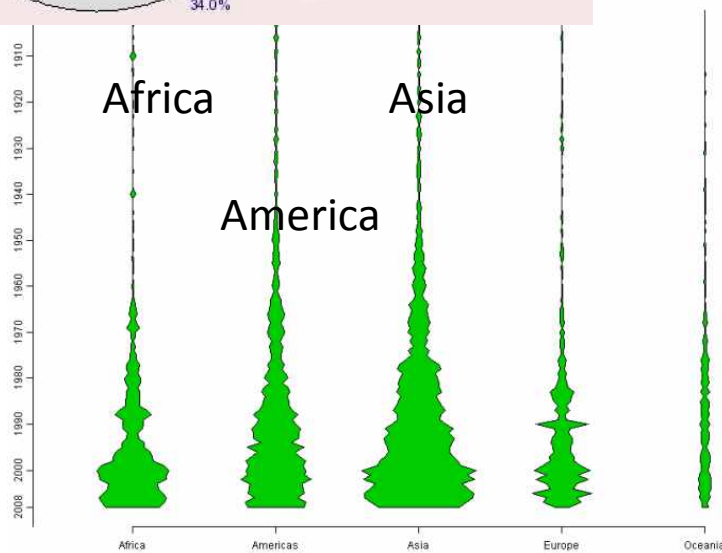
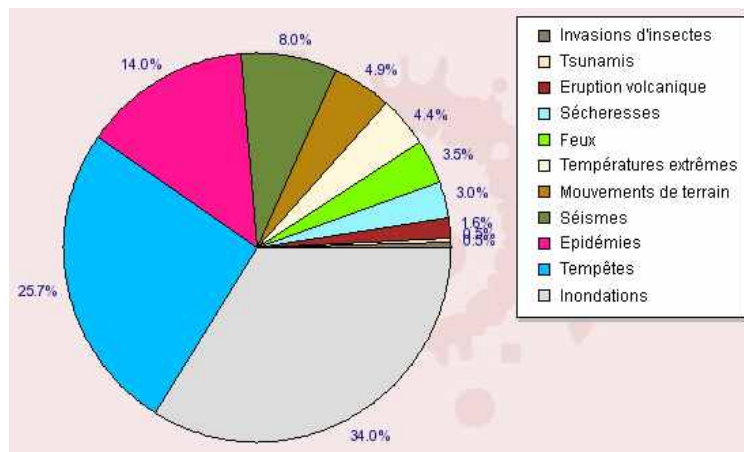
DEGRADED LAND, DEGRADED LIVES !



- **Desertification add poverty** : the **proportion of the poor** is the highest in drylands ; the proportion of the 800 millions of farmer who suffer from hunger live in drylands
- **Desertification increase migrations** : 1997 to 2020 : **60 millions people** are supposed **to leave** the drylands increasing seriously the number of actual ecological regugees estimated in Africa up to 25 millions
- **Climate change will** increase the affected areas by desertification (**30 to 40 %** according to IPCC medium hypothesis)
- **Desertification is a loss of economic value** : about **40 billions of USD per year** - 1 to 10 % of NGP of agriculture in many countries . Figures are undervaluated according to the cost of rehabilitation



drynet



DROUGHT

DESERTIFICATION

DISASTER

**IN OTHER WORDS DESERTIFICATION
IS A GLOBAL RISK ?**

http://www.notre-planete.info/geographie/risques_naturels/catastrophes_naturelles.php



MORE SHOULD BE DONE FOR DRYLANDS !

- The 193 states (Parties) and the UNCCD
- The donors
- The scientific community
- The Civil society



SCIENCE ON BOARD

DESIRE works on

The **DESIRE** is a global initiative in the context of “Combating land degradation and desertification” in the last FP6-2005 Global Change and Ecosystems Programme (EU)

- 20 partners from the EU and northern Africa
- 6 partners from elsewhere (China, Russia, Botswana, Cape Verde, Mexico, Chile,)
- 24 research institutes
- 2 NGOs

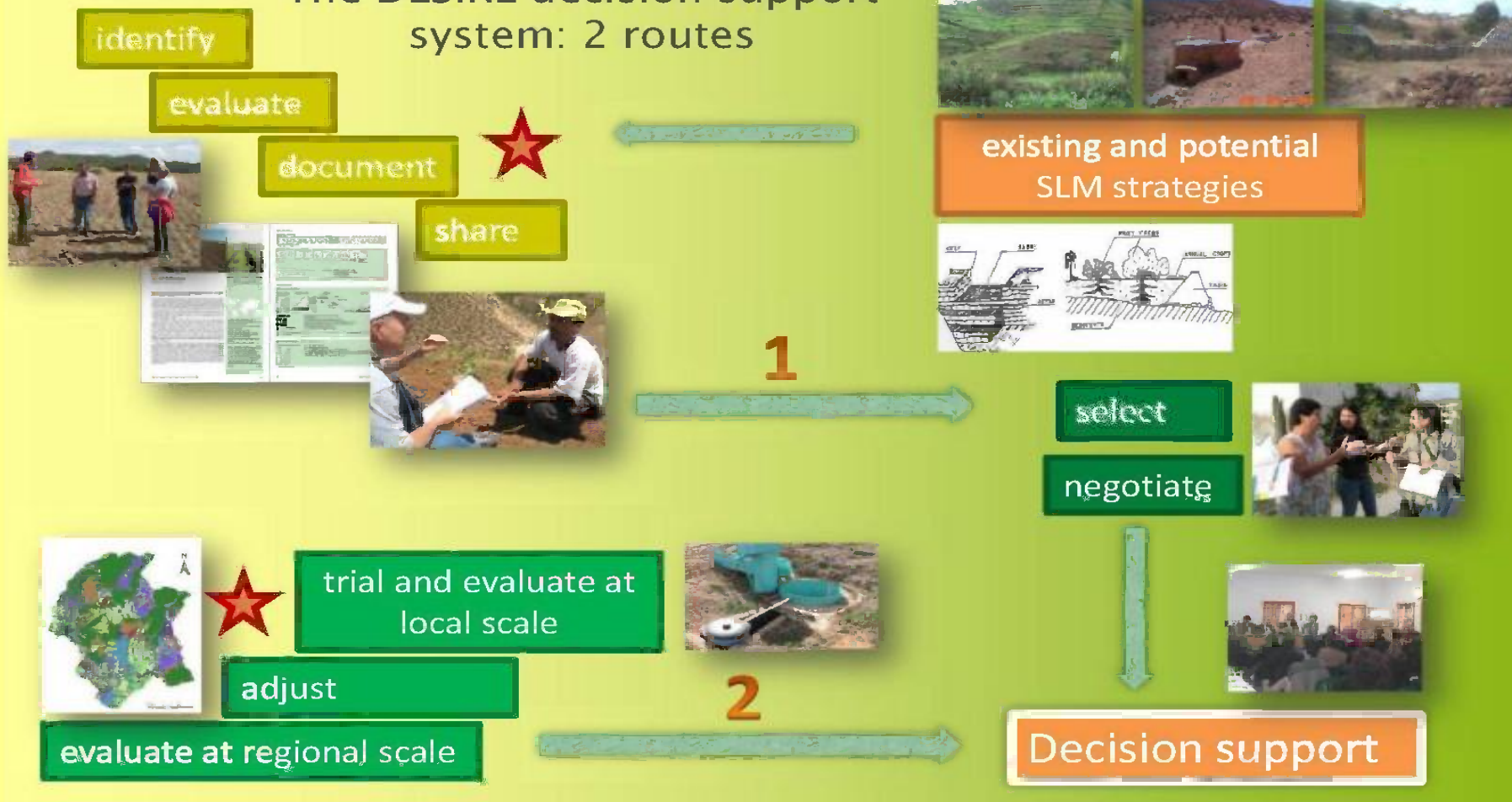


Soil erosion by **water**, Soil erosion by **wind**
 Competition in **use of water**
 Forest **fire**
Drought, Flash floods
 Salinisation, Degradation of **vegetation**



- **Map** desertification risk
- Explore socio economic context and needs
- Evaluate **indicators**
- Identify, evaluate and **select protection and mitigation strategies**
- Implement and **monitor the selected strategies in study sites**
- Evaluate, select and **model outputs**
- Select and use **dissemination products**

The DESIRE decision support system: 2 routes





DESIRE provide the **scientific basis** for taking affordable and effective action in the context of **complex problems** BUT also thinks that we can't manage, desertification and land degradation, without the combination of scientific knowledge and knowledge from the local stakeholders



More information :

www.desire-project.eu

www.desire-his.eu

www.wocat.org



A global initiative giving future to drylands

- 3 years project
- 14 participants 17 countries

Building CSO instruments
and capacities to get
drylands higher on the
political agenda

- Information exchange
- Specific training
- Facilitate collaboration
- Facilitate dialogue

- Capacity in actions.....
- Brésil : cisterns
- Turkey : replacing cotton by saffran
- Bolivia : ecological soja beans cultivation
- India : preservation of camel in the Thar desert and giving value to their milk
- South Africa : improving landmangement and
- Ouzbekistan : sensitizing decision makers by press tours



“Sustainable land management in drylands often rather needs more capitalising on what is already being done, than initiating new projects and programmes”



LEAGUE FOR
PASTORAL PROFILES
AND ENDOGENOUS
LIVESTOCK DEVELOPMENT



Instituto Sertão

Pelo Desenvolvimento Humano e Meio Ambiente



Shortage of water, outmigration, bayoud disease, diviving up of land, low value of oases products... compromise the future of the oases millenium ecosystems,



Morocco (Foum Zguid) composting and biological certification on henna : first time in Morocco !



Its possible !



**Morrocco (Akka)
cooperative building,
composting, packaging
for the dattes,
marketing...**



Its possible !

Morrocco (Aglaquel) innovating seedlings techniques and income generation for the women



Its possible !



Morocco (Icht) protect and multiply local « beldis » seeds and test marketing from local varieties

Its possible !



Some final words

- Beware of Anders « apocalyptic cecity »
- Consider land is **home/heimat** for the people leaving in drylands and for human kind in general
- Desertification : **generalized increasing intensity disaster** with long distance and long term consequences : combating desertification is not an option
- Public policy and local action are both needed for the success <http://www.geopopulation.com/dossier/comp-teur-de-la-population-mondiale/>