



Isolated wetlands in the Sahel: key seasonal resources under pressure

Joost Brouwer

Brouwer Envir.&Agric. Consultancy The Netherlands

images Joost Brouwer, Hans Hut, Leo Zwarts

Outline

1. Niger itself

2. Utilisation of wetlands in Niger, and some interactions, nearby & far away

3. Summary and conclusion



Some information on Niger

- 1.25 million km², mostly 200-300 m a.s.l.
- Approx. 10 million inhabitants
- Population growth 3.1% per year
- Northern 2/3 desert
- Southern 1/3 200-600 (800) mm/yr
- Poor soils mostly, rainfall not dependable; millet yield av. 300 kg/ha
- Difficult environment, low on UN indexes









Agriculture at isolated wetlands Niger

- Dry season crops: 42-64.000 ha (more after poor harvest upland)
- \$200-\$4300 per ha, vs. \$70 upland

high nutrition

competition with e.g. field maintenance

Livestock raising & isolated wetlands in Niger

\$35 million/yr; transhumance; nutrients





Fisheries at isolated wetlands Niger

Fisheries: \$11 million – river decreasing;
430 ton, \$250.000/yr, Tahoua alone





Natural products at isolated wetlands in Niger

 Wood, clay, reeds, traditional medicine: no data



Biodiversity at isolated wetlands in Niger

>1.2 million migr. waterbirds; value?





Drought & isolated wetlands in Niger

Drought 'insurance', safety net; migration



Summary:

- Wetlands in great demand by various user groups
- Use of wetlands affects use of other areas, in other seasons
- **Over past 15 years:**
- More people due to birth rate, drought, migration
- More dry season cropping
- Less travelling livestock access
- Degradation

Conclusion

PINReM of isolated wetlands needed (Participative Integrated Natural Resource Management)

Also for the sake of areas elsewhere