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ADVANCING A **NEXUS APPROACH**  
TO THE SUSTAINABLE MANAGEMENT  
OF **WATER, SOIL AND WASTE**



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INTERNATIONAL  
KICK-OFF WORKSHOP

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11-12 NOVEMBER 2013  
DRESDEN, GERMANY



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## **Case Studies on Opportunities In Adopting Nexus Approach in the Agriculture and NRM Sector**

**International Kick of Workshop  
11-12 November 2013  
Dresden, Germany**

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# Outline

- **Introduction**
- **Context**
- **Two Case Studies**
- **Recommendations**



# **Nexus Approach in NRM and Agriculture Sector**

**Nexus Approach is a transformative development model for enabling sustainable growth and creating prosperity in Africa by taking a holistic approach to development, which:**

- Values human, social and natural capital;**
- Efficiently and sustainably uses ecosystem goods and services; and**
- Builds resilience in a changing and increasingly interconnected world.**



## **Nexus Approach Focal Areas**

**Nexus Approach needs the development centered and relate to key development challenges. Proposed Bank focal areas include:**

- (i) Providing sustainable development**
- (ii) Efficient/sustainable management of natural assets [including land (agriculture, forests, other land uses), water and minerals]**
- (iii) Building resilience of livelihoods and economic sectors (physical/climate, economic, social)**



## **Building on Bank's Experience**

**Past Bank experience in agriculture and other sectors provides a useful building block for green growth development pathways.**

**Two examples from the Agriculture and the NRM Sector:**

- (i) Cape Verde – Picos and Engenhos Catchment Basins  
Planning and Development Project  
*(agriculture and forestry)***
  
- (i) Gambia – Participatory Integrated Watershed Development  
Project (PIWAMP)  
*(adaptation)***



# Cape Verde Project

**Project Objectives:** Improve soil conservation as well as water resources mobilization and development with a view to increasing agricultural production in a sustainable manner

*[Approval in 2002; entry into force in 2004; first disbursement in 10 Feb 2005; completion on 31 Dec 2010]*

## **Prior Govt Action:**

- **Financing some interventions**
- **Legal protection of ecosystems**
- **Strengthening the relevant policies**



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# Example of Nexus Approach Adopted in Cap-Verde







## **Cape Verde (cont.)**

### **Assistance provided by the Bank:**

**ADF loan: 5.96 million UA**

**Govt: 1.28 million UA**

***Others: 3.42 million UA***

### **Outputs and outcomes:**

- n Improved water harvesting and erosion control infrastructure (e.g. 17 catchment dams, 4355m of gabion walls)**
- n 387.2ha covered by mechanical soil conservation work**
- n Over 150,000 seedlings planted to control erosion**
- n 5,000 direct jobs for 28 months (labor intensive work)**



## Cape Verde (cont.)

- n 400ha of irrigated crops
- n Agricultural production up by 20%
- n Soil erosion reduced by 18%
- n 5% reduction in extreme poverty in the two water basins
- n Improved soil fertility through promoting use of agricultural residue
  
- n Lessons learnt
- n Sustainable land management is profitable for land owners and users
- n Adequate institutional support is essential
- n Better management of ecosystems resources contributes to poverty reduction in the longer term



## **Gambia – Participatory Integrated Watershed Management Project (PIWAMP)**

- n **Project Objective:** Increase land productivity and reduce soil erosion in a sustainable manner
- n **Activities:**
  - n Prepare community action plans
  - n Implement soil and water conservation works
  - n Enhance conservation farming
  - n Increase horticulture and livestock production
  - n Develop forestry and rangelands
  - n Promoting use of agricultural residue to restore soil fertility and also the enhancement or soil fertility management by biomass production via afforestation and use of nitrogen fixing trees
- n **Prior Govt Interventions:**
  - n The Lowland Development Project (Experiences influenced PIWAMP design)
  - n Focus on poor small holders depending on traditional crops and lowland rice cultivation



## **PIWAMP (cont.)**

### **Assistance provided by the Bank:**

**n NTF Loan: UA 4.95 million**

**n GoTG: UA 1.16 million**

**n *Others (IFAD): UA 4.9 million***

### **Outputs and outcomes of the assistance**

**n 195 km of contour bunds**

**n 5,800 ha planted**

**n 120 gullies controlled**

**n 36 sensitization workshops; 105 awareness raising campaigns - on conservation farming and community forestry techniques**

**n Cropped area increased from 17,802ha to 23,992 ha**



## **PIWAMP (cont.)**

- n Bank investment in PIWAMP has contributed to a six fold increase in total crop production (4,000 to 25,000 MT pa between 2006-2010)**
- n Upland rice yields increased from 1T/Ha to 1.4T/Ha**
- n Direct and indirect benefits to 164,310 farm families**

### **Lessons Learnt**

- Importance of effective co-financing partners (IFAD)**
- Need to ensure sustainability mechanisms to ensure that beneficiaries maintain infrastructure (Farmer Associations and Watershed Associations)**
- Adequate capacities and resources for partner institutions are needed to provide the support required of them**



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# Building Tidal Access





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## Discussing the benefits of the project interventions



## An under construction contour bund





## Conclusions

- **Lessons from past projects indicate that participation of communities, following integrated approach in development, political commitment, accurate valuation of natural and social assets are important in moving towards Nexus Approach in agriculture, NRM and other sectors**
- **Nexus Approach reinforces the need to address social, economic and environmental dimensions of development**
- **Nexus Approach must take the development context of a country into account to ensure results and sustainability**
- **Nexus Approach is a process of transition to wards adopting integrated development approach in NRM.**