Enhancement of Capacity Building on Rural Road Research Activities

(Ethiopian Case)

by

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Outline

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Background

- ERA is one of the oldest Road Authorities in Africa.

- The Road Research Branch was established in 1965. But it couldn’t be as expected......even we couldn’t have our own Design manual especially the specification.

- Change comes through research

- By having regional specification,...... promote locally available material....
  - Cost , Time, Performance of the road
Establishment of Research Steering Committee

- This initiative has been financed by AFCAP
- The main objectives of the Steering Committee

- To act as a bridge between researchers like universities and the road industry.
- Identification of researches.
- Organizing and dissemination of already completed research projects’ out puts.
- To monitor and support on-going research projects.
Establishment of Research Steering Committee…cont.

➢ To endorse the final output from researches.

➢ Dissemination of output results through-

   » Publication

   » Newsletters

   » Best practice reports

   » Workshop

   » Research Information Center…AFCAP
Establishment of Research Steering Committee…cont.

Member of the Steering Committee

- 6 staffs from ERA
- Representative from MoWUD
- All regional and rural roads authorities including ACCRA
- Ethiopian Road Fund
- Addis Ababa, Awasa, Bahirdar and Mekelle Universities.
- Contractors’ Association
- Consultants’ Association
Establishment of Road Research Center

- ERA is planning to establish dedicated Road Research Center.

- The Main Objective of the Research Center
  
  - To provide quality research services to the road industry.
  
  - To support the future demand of road design, construction and maintenance.
Establishment of Road Research Center…cont.

- The preparatory work towards the establishment of the center has been commenced.
- 20ha. land has been allocated
- On which purpose-made international standard research center will be built
- The building will have purpose made: offices, laboratory, workshops, Road library, conference rooms, trial sections.
Recently Completed Research Project

1. Performance Criteria and Life Cycle Costing for labour-based gravel roads in Ethiopia

- The project has been completed last year
- Done by TRL with DFID fund
- Objective

- To establish and promote appropriate engineering standards for labour-based unpaved roads in Ethiopia.

- To develop planning tools for unpaved roads.
Done on 52 gravel road projects

The output will be very useful for the development of specification for LVR.

Quality Control Guideline for Labour based road Project

Deterioration model……. Simple calculation/software was developed …..which is useful for maintenance planning, …. maint. Cost
2. Research on Lime Stone in Southern Region

- Ongoing research by TRL funded by AFCAP Crown Agent.
- Promote the use of locally available marginal material as construction material.
Recently Completed and On-going Projects Cont…

- We did trial section on Morocho - Leku

- We are trying to use it as base course material and gravel wearing course.

- Performance monitoring has been started.

3. Research on pavement material in different regions
   - Research by TRL funded by AFCAP,

   - Looking for the prevalent material in different regions for low volume gravel wearing courses.

- Monitoring performance….specification
Recently Completed and On-going Projects Cont…

4. Development of Design Manual and Bidding Document for Low Volume Road in Ethiopia

• Funded by AFCAP
• The consultant is from South Africa
• Objectives
  – to prepare a manual for the planning, design, construction and maintenance and standard bidding documents for low volume roads in Ethiopia.
Recently Completed and On-going Projects Cont…

5. Review of Surface Dressing Practice in Ethiopia

- Consultants are Asphalt Specialists from ARRB and South Africa.

- Funded by AFCAP

- Main Objective

- Assess the reason why surface dressing projects could not perform well.

- Review the design method and specification, quality control mechanism, method of construction, e.t.c.
Recently Completed and Ongoing Projects….Cont…

Expected Output

- Produce guideline for
  - Design
  - Method of construction
  - Quality control mechanism

- Workshop
Final Message

“Let’s make ourselves ready for change through RESEARCH and THINK BIG so that we can be on the shortest path to poverty free African Nation.”
THANK YOU