



CURRICULUM REFORMS: ESSENTIAL TOOL FOR EFFECTIVE IMPLEMENTATION OF CLIMATE CHANGE ADAPTATION STRATEGIES

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Presentation layout

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Introduction

- Changes in the climate system unequivocal

- Developing countries to suffer greatest risks due to:
 - Over-reliance on climate-sensitive sectors e.g. Agriculture & Forestry
 - Low institutional capacities
 - Poor resource base

- Thus, climate change (CC) adaptation indispensable

- Article 2 of the Paris Agreement (2015)- strengthen the global response to the CC threats
- For effective CC response- need well informed & responsible citizenry -effected through education
- Article 6 of UNFCCC- Education, training & public awareness for CC adaptation
- Education critical in improving climate response

- At what stage of human development should CC education programmes be initiated?
- Education key in creating new patterns of behaviour
- Education content is dependent upon the curriculum set at national level
- Current curriculums in developing nations not adequately addressing CC issue
- Need for reforms



Why curriculum reforms?

- Current curriculum not adequately addressing CC issue
- Climate science empirically documented- plenty of teaching material can be generated
- Intergenerational effects of CC-learners equipped with essential K, S, V & A to be able to deal with current & future CC impacts.
- Education for effective & efficient participation in promulgation and formulation of CC policies



Status quo (Zimbabwe context)

- Climate-related issues taught in
 - **Environmental Science**- Primary school level
 - **Geography & Science** subjects- Secondary level (O' & A' Level).
 - **Natural & Social Sciences**- tertiary institutions
- Consequently, students who do not take these subjects/ courses, lack the basic understanding and skills relevant to CC adaptation.
- Therefore CC education at all levels should be inclusive not discriminatory.

- CC not taught as a topic at both P & S curriculum (analysis of syllabus)
- Teachers at P & S levels have misconceptions about CC- lack an in-depth understanding
- Existing CC education & awareness programs(Plan Int, ActionAid, EMA, E. Africa) taken as “extra-curricular” activities, not examinable.
- CC issues treated as “trivial” yet should be core and mandatory in the curriculum for effective response.

Characteristics of climate change curriculum

- **An effective climate change curriculum should:**
 - **focus on behaviour change (Tbilis Decl., 77)**
 - **ensure mandatory CC education for all**
 - **aim at developing knowledge & skills essential for effective CC response**
 - **be holistic and interdisciplinary in nature;**
 - **be consistent;**
 - **have clear assessment procedures for CI**
 - **complement vision & objectives of the nation**
 - **relate to local, regional and global CC initiatives**



Curriculum Highlights

CC education be included in the curriculum at all levels as a prerequisite- lifelong CC education

- Dissemination of climate information by learners
- At P & S levels, CC be taught as a topic in compulsory subjects or be a subject examinable.
- Teachers at P & S trained on CC at teacher training colleges to increase awareness levels.
- **Skills-based** learning/ curricula to empower learners to respond appropriately to CC threats

- At tertiary level- build professionals with knowledge to participate in climate policy making
- CC issues not a matter of the natural/social sciences alone— a cross-cutting issue requiring input of all.
- Tertiary institutions to make use of the IKS to further refine theory & develop CC literature- response*
- Establishment of **climate change training institutions**. At regional level, use PAU.



Climate Policy Implications

- CC education at all levels of education should be the integral theme of climate policy-creation of new patterns of behaviour for response
- Policy should support CC adaptation research & emphasize on the establishment of **climate change information networks** for developing nations.
- **Bottom-up approach** in climate policy making- involve communities, academicians, learners and other stakeholders. **No to TOP-DOWN Approach**



Recommendations

- Provide funding for:
 - **CC curriculum development**
 - **training of educators in CC -human capital dvp**
 - **Production of level-specific CC teaching material**
 - **CC research on climate response.**
- Set-up a task force to review content & identify gaps in curriculums used in developing nations & advise governments appropriately on the need to incorporate CC issues

- Educators by virtue of being implementers of the curriculum should be involved in CC curriculum development.
- Continuously monitor, evaluate and reform the education curriculum to keep up with global trends
- Address political and social impediments that could deter the proposed reforms – stakeholder consultations



Conclusion

- Need to mainstream CC education in the 21st century curriculum so as to strengthen people's knowledge, skills and ability to adapt.
- CC education should be a lifelong process starting at an early learning age and continuing through all stages to promote behavioural change and enhance adaptive capacities of communities.



THANK YOU
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