An Integrated Framework for Promoting Eco Initiatives: Role of Educational Institutions as Execution Specialists

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Abstract - The basic question before a curriculum planner intending to design an Ecotourism Course is – whether it is to be need based or demand based. A demand based Course needs to have market considerations as its primary objective. It is controlled by supply-demand chain in both the choice and treatment of the curriculum. For instance, a market survey (Nivedita Mukherjee) sequences the required 'skills' of a Tourism Management in the following order: educational qualification, soft skills, aptitude, training and experience. A demand based curriculum planner could make choice of materials to cater to these skills, although a huge variation could arise in the interpretation of each of the 'skills'. The formulation of a need based ecotourism Course is more challenging. It goes beyond the content mapping that is usually done for market oriented curriculum. Planning a need based ecotourism course requires comprehensive understanding of the components ecotourism and their interrelationships. The direct and indirect impacts on natural resources and socio-economic conditions of human settlements at the ecotourism sites point to the requirement of concerted action towards conservation. This conceptual paper addresses the role of Educational Institutions in promoting eco-initiatives.

Keywords: eco-initiatives, educational institutions, ecotourism course/curriculum.

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I. Ecotourism Course – Should it be Demand Based or Need Based?

The basic question before a curriculum planner intending to design an Ecotourism Course is – whether it is to be need based or demand based. A demand based Course needs to have market considerations as its primary objective. It is controlled by supply-demand chain in both the choice and treatment of the curriculum. For instance, a market survey (Nivedita Mukherjee) sequences the required ‘skills’ of a Tourism Management in the following order: educational qualification, soft skills, aptitude, training and experience. A demand based curriculum planner could make choice of materials to cater to these skills, although a huge variation could arise in the interpretation of each of the ‘skills’. The formulation of a need based ecotourism Course is more challenging. It goes beyond the content mapping that is usually done for market oriented curriculum. Planning a need based ecotourism course requires comprehensive understanding of the components ecotourism and their interrelationships. The direct and indirect impacts on natural resources and socio-economic conditions of human settlements at the ecotourism sites point to the requirement of concerted action towards conservation. If ecotourism should encompass all what is implicitly and explicitly stated in our Constitution as the duties of the state and of the citizens for environment protection, it has to be a need based Course. Article 48-A, under Directive Principles of State Policy, states that the State shall endeavour to protect and improve the environment to safeguard the forests and wild life of the country. Article 51-A, under Fundamental duties, mentions that it shall be the duty of every citizen of India.

- to value and preserve the rich heritage of our composite culture
- to protect and improve the natural environment including forests, lakes, rivers and wild life, and to have compassion for living creatures.

In a way, Mahatma Gandhi’s line “Live simply so that others may simply live” has much relevance to the community considerations that must be associated with any activity, ecotourism included. The same theme has been represented in UNESCO Report of the International Commission on Education for the Twenty-first Century under the Chairmanship of Jacques Delors. The Jacques Delors Report has been published under the title “Learning: The Treasure Within.” The Jacques Delors Report states that education throughout life is based on four pillars: learning to know, learning to do, learning to live together and learning to be.

- Learning to know, by combining a sufficiently broad general knowledge with the opportunity to work in depth on a small number of subjects. This also means learning to learn, so as to benefit from the opportunities education provides throughout life.
Learning to do, in order to acquire not only an occupational skill but also, more broadly, the competence to deal with many situations and work in teams. It also means learning to do in the context of young peoples’ various social and work experiences which may be informal, as a result of the local or national context, or formal, involving courses, alternating study and work.

Learning to live together, by developing an understanding of other people and an appreciation of interdependence – carrying out joint projects and learning to manage conflicts – in a spirit of respect for the values of pluralism, mutual understanding and peace.

Learning to be, so as better to develop one’s personality and be able to act with ever greater autonomy, judgment and personal responsibility. In that connection, education must not disregard any aspect of a person’s potential: memory, reasoning, aesthetic sense, physical capacities and communication skills.

The Report further states ‘Formal education systems tend to emphasize the acquisition of knowledge to the detriment of other types of learning; but it is vital now to conceive education in a more encompassing fashion. Such a vision should inform and guide future educational reforms and policy, in relation both to contents and to methods.’

All the above and particularly ‘learning to live together’ are relevant for the philosophy of ecotourism course as need based.

II. CONTENT MAPPING OF ECOTOURISM COURSE

Ecotourism has numerous definitions and our purpose is not to state them. We shall list below some of the features that we could expect out of an Ecotourism Course, although it is not comprehensive.


- Biological diversity – importance and conservation
- Possible negative impacts of ill-managed initiatives of eco tourism sites in terms of land use, architectural design, utilization of resources and wastage disposal
- Importance of assessing environmental impacts arising out of unplanned tourism
- Tourism coupled with sustainable development of eco systems
- Eco- economic and cultural concerns and conflicts as well as development of local communities
- Community involvement in running ecotourism initiatives
- Creating environmental awareness among all the stakeholders
- Understanding regulations and restrictions stipulated by the Government related to Coastal Regulation Zones, environmental protection, biological diversity, etc.

Key elements of a viable ecotourism project

III. ECOTOURISM AS A VOCATIONAL COURSE

According to Miomir Despotovic, Iskra Maksimovic and Aleksandra Pejatovic, any vocational or adult (or community) education course needs to have the following components: accessibility, integration and partnership. We can extend this concept to ecotourism education.

i) Accessibility – Capacity building at both the personnel level and community level should be one of the objectives of ecotourism education. It must foster the necessary knowledge, skills, competencies and values to all the stakeholders. In this knowledge era, it is an acclaimed fact that access and equity are needed to bring socio-economic development.

ii) Integration – The institutions should have an integrated approach of offering Courses, so that it could open up possibilities of widening intellectual, social and professional development of individuals concerned. By integration, we refer to a wide canvas of methods.

iii) Partnership – The educational institutions need to play a key role in partnering with different wings of the Government (such as Tourism, Environment & Forests, etc.), ecotourism organizations, tour operators and their employees, NGOs, professional associations, local communities, travelers, etc. The academic activities need to be planned with the active participation of the stake holders.

IV. THE INSTITUTIONAL REQUIREMENTS IN LAUNCHING ECOTOURISM COURSE

The implications of the characteristics of ecotourism education on the functioning of the higher education institutions are given below:

- The educational institutions need to run extension or community oriented courses and continuing education courses, apart from formal mode. As such, most of the higher education institutions cater to the 18-23 age group of the population. Diversified modes such as distance education and on-line education need to be adopted.

- The facility for life-long learning must be available. This requires a flexible approach on the part of curriculum planning and implementation.

- The stake holders should be involved both in curriculum planning and implementation. The ecotourism curriculum should be dynamic to respond to socio-economic needs and changes. It is evident, once we realise that the word ‘curriculum’ comes from the Latin verb ‘currere’ meaning to run. It actually denotes a course to be ‘run’; it is a metaphor for an educational course to be taught or learned. Still the dynamic nature of curriculum is implied.
V. Desirable Professional Values of Teachers

The values ascribed to academic profession by the National Commission on Teachers II (1983) have much significance in running ecotourism courses:

- Acquisition and transmission of knowledge
- Social relevance of knowledge
- Establishing link with the society through extension work
- Continuous efforts to upgrade knowledge
- Freedom of inquiry
- Desire for excellence
- Willingness to collaborate
- Critically analyzing the events
- Willingness to take criticism
- Initiating the innovative activities
- Possessing skills for planning and guiding the activities
- Motivating the students
- Favorable attitude to execute the activities
- Having problem solving skills
- Knowledge of socio-economic and cultural status and sensitivities of the communities involved

VI. Desirable Traits of an Ecotourism Student

Although choice of a course is the prerogative of a learner, some of the desirable traits of an ecotourism student are mentioned below:

- Spatial intelligence – the ability to form a mental model of a spatial world and to be able to manipulate and operate using that model.
- Emotional intelligence – the ability to know oneself and to use that knowledge to operate effectively in life. This is the ability to motivate oneself and persist in the face of frustration, to delay gratification, to control impulses and to keep distress from swamping the ability to think.
- Inter-personal intelligence- is the ability to understand other people: what motivates them, how they work and how to work co-operatively with them.
- Naturalistic intelligence – Naturalistic intelligence is the ability to understand, relate to, categorize, classify, comprehend, and explain the things encountered in the world of nature.

VII. Desirable Features of Ecotourism Course

Modularisation of curriculum needs systematic planning and a willingness to have a paradigm shift from the conventional method of forming curricular contents as an ‘indivisible block.’ The term paradigm shift was introduced by Thomas Kuhn in his highly influential landmark book, The Structure of Scientific Revolutions. Kuhn shows how almost every significant break through in the field of scientific endeavor is first a break with tradition, with old ways of thinking, with old paradigms. Familiar examples are:

1. Copernicus created a paradigm shift by placing the sun at the center of the solar system, as against the theory of Ptolemy according to which the earth was the center of the universe.
2. Monarchy was followed in many countries as a divine right to rule; the advent of democracy caused a paradigm shift; the concept of welfare state arose.
3. Typewriters were used for documentation; computers have revolutionized entire office procedures and have compelled the seniors to catch up at the earliest (not to be left behind due to technology gap).

When we do not have any objection to the above paradigm shifts, why don’t we think of a paradigm shift in Higher Education scenario? In this context, it is worth extending the views of Tom Peters & Water man Jr. expressed in one of the best sellers – “In Search of Excellence”. The book prescribes conditions for excellence in the corporate world. But the parameters mentioned in the book can be contextualized for the curricular processes of an ecotourism course with the following features:

1. Learner Centered
2. Open Minded and Willing for Paradigm Shifts
3. Contextual Curriculum
4. Content Expertise
5. Well Set Teaching Learning Processes
6. Course Design with a Realistic Approach
7. Teacher autonomy but fused by Institutional Ideology

VIII. Planning Ecotourism Courses with Stress on Affective Domain

As is pertinent to curriculum designing processes, specification of goals and tasks (skills and competences required to function in ecotourism segment as decided by the teachers on the basis of need analysis), mapping the content (in keeping with the required skills and competences), specifying teaching-learning processes (methods, materials, etc.), the method of assessment and evaluation of curriculum -
these are applicable to Ecotourism as well. It needs to be noted that the curriculum should address cognitive, psychomotor and affective domains. Although the first two are fairly well addressed in educational institutions, ecotourism course requires particular stress on the affective domain. Assessment of a student’s affective domain is not easy because it is associated with his/her attitudes, values and feelings that cannot be gauged easily. Personal feelings and beliefs of the student can remain undisclosed. Achievement of instructional objectives in the affective domain is difficult to measure, compared to the cognitive and psychomotor domains. Bloom’s Taxonomy of affective domain contains five levels: receiving, responding, valuing, organization and characterization by value.

**Level 1: Receiving:** is the willingness to receive or to attend to particular phenomena or stimuli in the domain of feelings or emotions. Receiving has been actively attending.

**Level 2: Responding:** refers to active participation on the part of the student. The student is sufficiently motivated not to just be willing to attend, but is involved in or committed to a subject, activity, emotion etc., so as to seek it out and gain satisfaction from working with it or engaging in it. Responding indicates the desire that a student has become sufficiently divided into three subcategories: awareness, willingness to receive, and controlled or selected attention.

**Level 3: Valuing:** is when the student sees worth or value in the subject, activity, assignment, etc. An important element of behavior characterized by valuing is that it is motivated, not by the desire to comply or obey, but by the individual’s commitment to the underlying value guiding the behavior. Learning outcomes in this area are concerned with behavior that is consistent and stable enough to make the value clearly identifiable.

**Level 4: Organization:** is the bringing together a complex combination of values, possible disparate values, resolving conflicts between them, and beginning to build an internally consistent value system. The individual sees how the value relates to those already held or to new ones that are coming to be held. The integration of values is less than harmonious; it is a kind of dynamic equilibrium that is dependent upon salient events at a specific point in time.

**Level 5: Characterisation By Value:** Internalization of values has a place in the individual’s value hierarchy. The values have controlled one’s behavior for a sufficiently long period of time to develop a characteristic “life style”. The behavior is pervasive, consistent, and predictable.

Affective domain has particular importance with reference to appreciating socio –economic and cultural parameters, which is a core part of ecotourism.

### IX. Structuring the Ecotourism Course

The level of an educational programme depends on the intensity to which the contents are pitched. At the specialization level, Ecotourism has a multidisciplinary approach. Apart from traditional tourism related topics, it covers a wide variety of subjects. A few examples are: Ecology and Conservation (to understand the basics of ecosystem function, web of life, habitat, human environment, etc.), taxonomy (to recognize classification and identification of organisms), geology (to appreciate rock and soil formation and classification), marine –, freshwater – and land environments, and government regulations (legal issues regarding environment, coastal regulation zone, Wildlife Protection, etc.). *(Australian Correspondence Schools Distance Education)*.

The recent trend in organising the curriculum is to pitch the Programme as a combination of modules. A module is a set of functionally connected knowledge, skills and competences necessary for the performance of a particular job or task. The vocational courses utilize two types of modularization *(Miomir Despotovic, Iskra Maksimovic and Aleksandra Pejatovic)*.

(i) One is general modularization where modules are built around a particular Diploma or Degree qualification. In this case, completion of individual modules does not fetch certification, but only helps in progressing towards attainment of final qualification. For instance, a Tourism Degree Programme consists of six semesters as six modules but completion of all the six only fetches the Degree qualification.

(ii) Another is fragmental modularization. It leads to partial and independent certification with the completion of individual modules; for instance, Australian Correspondence Schools offer Courses on Ecotour Management, Bush Craft & Wilderness Management and Ecotourism Tour Guide as fragmented modules worthy of independent certification; completion of all the three modules enable certification of Proficiency Award in Ecotourism. *(Australian Correspondence Schools Distance Education)*.

The instructional design through fragmental modularisation -

- provides flexibility to the learners to choose their pace of study
- could help an institution achieve economic efficiency as instruction for common subjects can be combined
- enables learners to have the option to choose the modules depending on their skill deficit and occupational need (this is more relevant for Continuing education of the employed group, where the skill upgrade secures higher position or change of
line; while devising academic programmes for continuing education for employees in the tourism sector, specification of goals and tasks as also the content could be decided by seeing the skill deficit between the skills possessed and the skills required.)

- facilitates comprehensive certification through stage-wise completion of module.

X. Community Oriented Ecotourism Studies

Particular importance in ecotourism is community development. The higher education institutions, teachers and students have an important role to play with respect to community development as part of national development. Traditionally, the higher education institutions use to concentrate only on teaching and research. The third dimension, namely extension or community centred activities has been added by UGC in its policy frame work. The community initiative needs to be built in such a way that it becomes self sustaining, even if external inputs are no more available. It amounts to capacity building with a sense of self reliance. The extension activities are the nuclei of institution – community interaction. The extension education provides ample opportunity for the students to apply their knowledge. Significant results have been achieved through community – institution interactions in the areas of agriculture, adult literacy, child nutrition, plantation and social forestry, etc. (Indira Gandhi National Open University, New Delhi; Raza Moonis and Fernandes M). The ecotourism area provides a suitable platform for extension activities: the communities offer natural and manmade resources, the flora, fauna, local artisans and local unemployed manpower, etc., while the institutions can provide expertise, planned activities, awareness level and enabling programmes. Organising extension work can be of use in understanding the socio-economic and cultural concerns and conflicts as well as issues related to development of local communities. It could also sensitise the students against negative effects of ill-managed systems like physical displacement of persons, violation of human rights, conflicts in control of land-use, damage to the environment etc, such as the ones stated below:

1. The pressure on Andaman and Nicobar islands is evident from the fact that as per 2001 census, the population is around four lakhs but more than one lakh tourists have visited during 2005; with much less accommodation available, the upcoming resorts pose problems in the light of Coastal Regulation Zone (CRZ) rules, which apply for coastal stretches of sea, bays, estuaries, creeks, rivers, backwaters – all influenced by the tidal action. For such a fragile and delicate environment, ecologically conscious tourists are needed. (Prachy Pinglay)

2. Goa, for instance has a105 km long coastal line and much of it comes under the purview of CRZ rules; environmentalists have raised the issue that construction activity has proceeded in violation of CRZ rules in order to have a sea view. (R Venugopalan Nair). Another report mentions that in some of the localities, the local people express concern over illegal land conversions, since their claim to natural resources is eroded.

The planning of extension activities based on ecotourism requires need assessment in the form of socio-economic information regarding population, age distribution, sex ratio, occupations, income levels, etc. Potential community leaders are also to be identified. A resource inventory based on natural resources, cultural events and other specialties are to be gathered. Identification of ecotourism activities should harp on the combination of available local resources, manpower and expertise. In order to ensure success in the extension activities, the components are to be identified in terms of planning, implementation, monitoring and evaluation and, teams are to be formed to carry out the work. These activities could help in spreading the messages regarding rights and duties of citizens, legal methods of redress, human rights, etc.

Some of the success stories of community run ecotourism initiatives are to be brought to the notice of students. Examples are available from Sikkim (Dzongu Ecotourism Committee managing trekking), West Bengal (local villagers running Community Tourism at Sundarbans) and Kerala (local adivasis with traditional knowledge of forest and wildlife participating in ecotourism programme in Periyar Tiger Reserve). (Ashish Kothari)

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