

Human Values & Professional Ethics(BHCQ 205)[B.SC\(H\)](#) CS- Sem II

Lecture: 18 & 19

Unit V

Topic: 26(C)

The ability to identify & develop appropriate technology & management system for eco-friendly & man-friendly production system:

The modern technologies and systems are all human inventions in response to the needs visualized under the influence of the prevailing worldview. Accordingly, they have been designed and

optimized to the objective functions best suited to this world view. In order to facilitate the development of holistic technologies and systems, it will be necessary to visualize alternative objective

functions and to formulate appropriate criteria for evaluation compatible with comprehensive human

goal. Generally speaking, there are three broad criteria to guide the development of such technologies

and systems:

- a) Catering to appropriate needs and lifestyles,
- b) People-friendly, and
- c) Eco-friendly.

Criteria for Technologies

The above mentioned general criteria can be itemized into more specific form as follows:

1. Catering to real human needs
2. Compatible with natural systems and cycles
3. Facilitating effective utilization of human body, animals, plants and materials
- 4.Safe, user-friendly and conducive to health
- 5.Producible with local resources and expertise as far as possible
- 6.Promoting the use of renewable energy resources
- 7.Low cost and energy efficient
- 8.Enhancing human interaction and cooperation Learning from the Systems in Nature and

Traditional Practices: If we really wish to gain an insight into the holistic systems, we have a lot to learn from systems of nature and from traditional

practices. With modern developments in science and technology, and their widespread application, an

impression has grown that the nature is primarily for exploitation as per the whims and fancies of

human beings, the nature has to be tamed/controlled and exploited for human enjoyment. Further, it is believed that the systems in nature are all primitive and have to be replaced by man-made systems. This is how one looks at 'development'. Similarly, it is also believed that the traditional practices are all obsolete and have to be rejected outright. This arrogant attitude towards nature and the traditional know-how has caused much damage to humanity in recent times. It is high time we critically examine these beliefs and rectify them in the light of right understanding.

In reality, nature is not only our nourisher but also a learning ground. The human beings are an integral part of this self-sustaining nature and it is essential to understand its functioning and systems to live in harmony with it. After all, it is only by diligent study of nature that all the laws and principles governing various processes have been discovered by human beings. In a similar way, the systems and cycles of nature also need to be understood and emulated as required in man-made designs. Then only, we can correctly visualize and evolve the holistic way of living.

As for the traditional practices, it is true that with increase in knowledge and skills, and with changing needs, it is necessary to make improvisations in technologies and systems of human use, however, in order to do that it is essential to critically evaluate their strengths and weaknesses. It is important to identify the characteristics which have enabled the traditional practices to serve humanity for long periods. The eco-friendly and people-friendly characteristics of many traditional practices are very much worthy of our recognition and retention. Then we will be in a better position to utilize our present day knowledge to augment the systems and make them more effective, efficient and more suited to current needs. For example, we can learn a lot from the traditional practices of eco-friendly agriculture techniques, watershed management, eco-restoration, herbal formulations, preservation techniques, and artisanal practices and so on. It does not amount to going backwards but rather enables us to avail from the vast storehouse of wisdom and experience so that we become better prepared to take the leap forward in the right direction.

