



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

Women and Natural Resource Management with Reference to the Santhal Women

1 Chinmoy Sing, 2 Bijoy Pandit, 3 Dr. Laxmiram Gope

1 Assistant Professor (SACT) Department of Education, Bandwan Mahavidyalaya, Baundwan, Purulia (West Bengal)

2 Former student, Department of Education, Vinaya Bhavan, Visva Bharati, Santiniketan (W.B)

3 Dr. Laxmiram Gope, Assistant Professor, Department of Education, Sidho-Kanho-Birsha University, Purulia (W.B)

Abstract: It's noticed that, which society/nation are more advanced and developed where women hold very prestigious position in the society. In the Indian context women has very high and prestigious place from the very beginning means from the ancient to the modern society in the all section of the society. Its was also noticed that in Indian women are worship as 'Dhevi' Women gods. they hold more capacity or power then the man gods. In Indian cultural context and spiritual context women are sacrificing as a Mother god. Our nation also said as 'Maa Bhari' or Bharat Mata'. In our sole book its is reflected that women are more pious and sensitive in many aspects than the male member of the society. Our Veda, Upanishad, various schools of Indian philosophical thought unfold and express the position of women in the society. Through this small work researcher want to investigate the Santhal women and their natural resource management technique, how santhal women plays very crucial role for the management of the natural resources and how they protected the nature from the big calamity or natural hazards. Through the participatory cum discussion method researcher reviles that the Santhal women has many strategy and knowledge regarding the protection of nature and natural resources management. Investigator expresses the result through the tabular form.

Key word: *Women, Santhal women, natural resource, Resource management.*

BACKGROUND OF THE STUDY: A woman is an adult female human member. The term *woman* may also refer to a girl (a female child or adolescent). The Etymologically The spelling of "woman" in English has progressed over the past millennium from *wīfmann* to *wīmmann* to *wumman*, and finally, the modern spelling *woman*. In Old English, *wīfmann* meant "woman" (literally "woman-person"). In this study context women refers to the santhal women those who strongly involve in the process of natural resource management. As we know santhal tribe is a peace living tribal community who live in the natural atmosphere or natural surroundings. Actually, santhal community has high insight regarding nature and natural resources and particularly women member of the society has deep involvement towards nature santhal live through the nature by the nature and for the nature. Actually, santhal civilization is depend on 'JAL, JANGAL & JAMIN' (Water, forest and Land). Therefore, investigator explore the resource management practice of santhal women, how they manage natural resources through their own indigenous practices such as a. Environmental resource management, Societal resource management and Economical Resource management.

Its noticed that, which society/nation are more advanced and developed where women hold very prestigious position in the society. In the Indian context women has very high and prestigious of place in the all section of the society. It was also noticed that in Indian women are worship as 'Chairwomen gods. they hold more capacity or power then the man gods. As we know our Veda, Upanishad, various schools of Indian philosophical thought explore and express the position of women in the society and there are respected in social situation in the society. As we know in ancient India women was take various role in the society and they performed vary crucial as role in the society as man, at that time women was treated equally to man member of the society and women are considered as more sacred and poised than the male member of the society. at that time women performed 'worship and actively participated all kinds of ritualistic, household, family management, homemaker, even women are participated 'yoga' as rishi performed, women considered as 'Rishika'. they actively participated with 'war. Women are very acquainted with 'astravidya, Sastravidya, Dhanurvidya, charu kala, home science. Therefore, in Indian concern Women are the gift to the society. During ancient period of India, women played a significant role. The Rig Vedic Women in India enjoyed high status in society. Their condition was good. The women were provided opportunity to attain high intellectual and spiritual activity such as 'yoga'. There were many women Rishis during this period. Though monogamy was mostly common, the richer section of the society indulged in polygamy. There was no sati system or early marriage. But from enjoying free and esteemed positions in the Rig-Vedic society, women started being discriminated against since the Later-Vedic period in education and other rights and facilities. Child marriage, widow burning, the purdah and polygamy further worsened the women's position. The epics and Puranas equated women with property. Even Buddhism did little for women. Though the Maurya kings often employed female bodyguards, spies and 'Striadyakshamahamtras', their status was still quite bad. Upper caste ladies had to accept the purdah. During this period men were polygamous and widow burning was an accepted norm. Arthashastra imposed more stigmas on women as Kautilya dismissed women's liberation and they were not free even to go elsewhere without husband's permission.

They became worse off in the Gupta period. The Smritishastras abused them; Manu dictated a woman **would be dependent on her father in childhood, on her husband in youth and on her son in old age**. Apart from child marriage and sati, prostitution and Devadasi system became widespread. Ancient **Women and Education**: There are some bright exceptions in this dismal picture. The role of women in Ancient Indian Literature is immense. Ancient India had many learned ladies. There were two types of scholarly women — the Brahnavadinis, or the women who never married and cultured the Vedas throughout their lives; and the Sadyodvahas who studied the Vedas till they married. Panini mentioned of female students' studying Vedas. Katyana called female teachers Upadhyaya or Upadhyayi. Ashoka got his daughter, Sanghamitra, inducted into preaching Buddhism. From the Jain texts, we learn about the Kousambi princess, Jayanti, who remained a spinster to study religion and philosophy. Often, Buddhist nuns composed hymns. Women did write Sanskrit plays and verses, excelled in music, painting and other fine arts.

Women in India: After independence (1947 -2020):

After independency Indian women plays very crucial role in the all section of the society, they has plays tremendous role in the field of agriculture, science and technology, laws, social activist and here researcher means to say women are performed very role in the all section wither is family mater or outside family, they not only engage in the family but they stand equal to the man member of the society. Researcher point of view women hold much more sensitivity aspects in respect to nation and family matter, they are more energetic and emotional being actually they are the symbol of love and affection. A single mother is equal to thousand school master. Women hood depend on caring and sharing. Through the educational policy analysis it was identified that from the University education on commission (1948),MadjhamikShikshaCommission(1952-53),Indian education commission(1964-66) ,all commission emphasis regarding women empowerment and their quality education. Due to neglect of women education colonial period we lag behind in many sector and more than 200 year British dominated us many ways, firstly they took our own education that was based on ancient value and sprit, which talks about the humanity,equality, fraternity,brotherhood, womanhood and so on.Britisher try to broke our backbone that is our education.In the word of mackalle 'by blood and colour they are Indian but test,habit, behavior they are british.e our aims of british Indian education .Only Indian people can ,riding,writing,and arithmetic but not able to think independently, macakely wants to India as a true dominant nation.In the word of M.K.Gandhi'... *because the British administrators, when they came to India, instead of taking hold of things as they were, began to root them out. They scratched the soil and began to look at the root, and left the root like that, and the beautiful tree perished* ((MAHATMA GANDHI AT CHATHAM HOUSE, LONDON, OCTOBER 20, 1931)). It is reflected within the Dharmapala famous writing 'the Beautiful tree'.

Its noticed that during the British period Indian women are very much deprived in all aspects/sector education, social prestige, contribution of science and technological field, they only confined within the family activities and agricultural field.

After recommendation of education commission in the year of 1968,1979,and 1986 national policies gives important on women education and also explored the role and responsible women in the society ,for the fulfillment of social dements and ensure the national development women have very crucial task as because women are the equal to the male member of the society i.e 50/50=100.So if women are lag behind then the male member of the society then it's very much difficult taxsk to enrich our society. Anotherreligion behind it mother is the first teacher of her children, education is the priceless ornaments of the girls, if we educated girls then we able be educated nation. So girls education is very much is essential and education is the core parameter for inclusion of girls in all section or sector. At present our educational goals is inclusive growth and mainstreaming in the society. therefore, our education policies always arguing about the girl's education and for their empowerment. Specially 1986 national education policy gives the watages of following dimensions regarding women education. This policy focused over Education will be used as an agent of basic change in the status of women. This policy also focused over the **Empowerment of Women**: The national system of education will play a positive role in the empowerment of women. It will foster the development of new values through redesigned curricula, text books, the training and orientation of teachers, decision makers and administrators, and the active involvement of educational institutions. **Women's Studies**: Women's studies will be promoted as a part of various courses and educational institutions will be encouraged to take up active programmes to accelerate the pace of women's development. 'Its historic events when National education policy 2020 pass by in Indianparliamentarian.They really feel world around change in the field of education, new innovation, thought,theories,principleand human growth and development direct interference in the field of education,we achieve lots of change in science and technology,now we believe in the star war,virus-bacteria warfare,now our mindset drasticallychanges.Now we analysis human beings through the lie dictatorstest, researcher means to say many machinist interferencetake place in the field of education so its urgent needs to change our education system and reform according to changing -robotics world order. Itreflects that our education policy 2020 basically focused over the main streaming and inclusive development and uphold India as a global economy and based on the knowledge power, so this education policy and its implementation promoted new India vision and 'sabkasathbabkabhikash' depend on the quality education. In this concern women education is must and we shall give special attention to women education.

National curriculum framework-2005 give first priority regarding ethnicity and cultural diversity of our nation, our children act and think according to their cultural and social background. it's clearly observed that the ethnic perspective plays vary crucial role for the cognitive development of the children, children basically like to reconstructed their ideas and experiences whatever we incorporated our curriculum according to their social and environmental atmospheres. Therefore, every learning experience must be based on the cultural and social experience because such kinds of learning experiential learning promote the concrete concept of the abstract ideas. With these reports it also gives important on the 'individual differenceand capacity to think and judge independently. and 2009 NCFE (National curriculum framework for teacher education) explore the essence of indigenious -cum-ethnopedology in the field of teacher education. Therefore, we have to incorporated indigenious pedagogical aspects into the teacher education curriculum, that emphasizes on the meaningful knowledge construction among the learner and through this process we can sustained our cultural heritage within the society and able to transfer social norms, value, heritage and cultural aspects of the society from the generational way. Specialreally, we are able to 'indigenization' of our curriculum. In this regards researcher collected data for checking young B.ED students views regarding incorporating indigenious pedagogical knowledge in the formal teacher education curriculum. Its noticesthat among the 100 trainee most of the teacher's trainee arguing about the incorporate ethnic-indigenious pedagogy in the formal teacher education programme. Basically, researcher was collected data through the focused group discussion methods and unstructured questionnaire methods. out of 100,85(%) Santhal community trainee teacher opined to incorporated indigenious pedagogy into the formal teacher training curriculum, specially refers to their language, customs, nature study process, animal husbandry technique, woods craft, gardening, water preservation methods, ornament, dress, marriage, custom's, rituals,

nature study, environmentally friendly activities, indigenous games and so on. Further researcher also explored the findings on the basis of the gender and finds out that the women are trainee are the more sensitive and having most favorable attitude towards incorporate indigenous pedagogy into the teacher education curriculum. Women student has most favorable opinion regarding it as because they deeply coordinated with the social and environmental activities and all the ritualistic activities associated with nature most of the women member performed and basically tribal member special reference to the santhal women collected their livelihood from the forest and nature so indigenous community women much more acquainted about the nature and its natural laws. But its also notices that the indigenous instructional aspects rapidly erosion or disappeared from the community due to adaptation of western patter of life style and lack of methodology of incorporation these knowledge in formal educational curriculum. It's very unfortunate even today we are unable to explored the scientific based of indigenous practices which is inherent with the community life and passed down various means such is observation, doing of content, trial error, and deeply engage with the environments and also long-time perception to the nature and natural change. Therefore, its urgent needs to incorporate such knowledge aspects in the educational process and at the time of curriculum development we must be concentrated about these knowledge aspects for enchment of inclusive growth as well as ensure development with the situational based. In this perspective's women and the natural resource management has many utilizations of environmental, economic and social perspectives, because situational cum indigenous knowledge has many utilizations for resource management. Indigenous practices of the indigenous community take advantages when the resource is not available, not affordable and viable. These knowledge practices have strongly associated with the land of the community from the long period of time and people are capable to utilized these knowledges very easy way and for the long-time engagement of such knowledge respective community member are well aware about the use of such indigenous - community centric knowledge. In the 21st century our national education policy 2020 also epiphysis for revive and re used policy, on the word of **National education policy 2020** "Knowledge of India" will include knowledge from ancient India and its contributions to modern India and its successes and challenges, and a clear sense of India's future aspirations with regard to education, health, environment, etc. These elements will be incorporated in an accurate and scientific manner throughout the school curriculum wherever relevant; in particular, Indian Knowledge Systems, including tribal knowledge and indigenous and traditional ways of learning, will be covered and included in mathematics, astronomy, philosophy, yoga, architecture, medicine, agriculture, engineering, linguistics, literature, sports, games, as well as in governance, polity, conservation. Specific courses in tribal ethno-medicinal practices, forest management, traditional (organic) crop cultivation, natural farming, etc. will also be made available. An engaging course on Indian Knowledge Systems will also be available to students in secondary school as an elective. Competitions may be held in schools for learning various topics and subjects through fun and indigenous games. Video documentaries on inspirational luminaries of India, ancient and modern, in science and beyond, will be shown at appropriate points throughout the school curriculum. Students will be encouraged to visit different States as part of cultural exchange programmes.

How Indigenous knowledge associated with indigenous communities' women:

As earlier mentions each community passed /hold deep indigenous knowledge and its uses many fields such as agriculture, housing, cooking, fishing, human and animal healthcare and so on. So, it can be said that indigenous community's member well known to various indigenous practices and through these practices they survive in various risky situation and they sustained through their grassroots level knowledge i.e indigenous knowledge. Basically women member of the indigenous communities has much involvement to the indigenous practices to their day to day life and they are very much sensitive towards of such knowledge. *Van den & Hawkins (1996)* has defined this as the knowledge of that held in the rural society, usually based on the experience of many generations and unique to each cultural group. Usually it contains more information on local diversity and complexity than scientifically derived knowledge. Women had been the pioneer of plant domestication and planned agricultural from the onset of civilization. Over times, control on agricultural practices had been taken over by the men, and they became the owners of the land and other inputs. Women constitute almost half of the total population in India and approx. 80% live in the rural areas. The rural women are intensively involved in all phases of agriculture, natural-forest resource collection, land management having a great bearing in the production systems. Women use many indigenous technologies and indigenous technical knowledge that the scientists, developmentalist have little know. Now it became growing field and uncommon interest of many intellectual person and they concentrated about the indigenous knowledge practices and its utilization of many regional risk's management capacity. Therefore, indigenous knowledge gained global recognition through the United Nation conference on Environment and Development (UNCED) IN 1992, as well as through documents such as the world conservation strategy of international union for the conservation of nature and natural resources (IUCN) In 1980 and Brundtland commission, our common future and world commission on environment and development (WCED) in 1987.

Many of the world's richest biodiversity areas have been for millennia, and still continue to be, inhabited, managed, maintained and defined by indigenous people against destruction. Knowledge system of the indigenous communities is being increasingly utilized to identify useful species and methods for preservation, processing and application of those species. Many indigenous knowledge experts and I.P.R (Intellectual property right) give us a message towards role and responsibility of women to manage natural resource, women are much sensitives, respectful in associated with preservation, maintenance, innovations and practices of indigenous knowledge. Women are very much capable to accorded and embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge. In this study we are try to encourage respective communities to innovations, participation and practices of natural resources management ethics which were inherent within the community's practices. As because if we loss these indigenous knowledge practices from the respective community then we must face many problems and challenge in these regards. We may destroy the natural resources as well as ecological balances, in the same ways we loss biodiversity, bio-piracy and many other challenging elements which helps us to sustained our earth.

NEEDS FOR THE NATURAL RESOURCES MANAGEMENT:

Natural resources management for the sustainable development through an ecosystem approach has been incorporated to all levels of policy making especially educational policy perspective highly demand the natural resources management techniques. In this concerns tribal women has many indigenous knowledges for natural resources management. They are the highly involve with the traditional knowledge system and tribal women specially the santhal women are more sensitive and they have direct contact with the nature and natural phenomena. This communities' women and their natural resource management techniques has many advantages in the present era particularly when we struggle for the achieving the sustainable development goals. these natural resources

management techniques have many advantages in the many dimension such as ecosystem, environment: the terms Ecosystem is a familiar term to many, but its meaning varies depending on the user. A current definition as used by EPA (1994) is a dynamic complex of plant, animal and micro-organism communities and their non-living environments, interacting in a functional unit. Another comprehensive definition (Gonzalez,1996) is a volume of land, air and water, with natural boundaries, determined primarily by landscape features and climatic factors. It encompasses a set of natural ecological processes, organisms and anthropogenic activities that function within a nested hierarchy of volumes. Ecosystems are like strata or clusters constructed on the basis of such factors.

- Land-forms (e.g., geographical features).
- Air patterns (speed, direction and temporal quality of winds).
- Pattern of temperatures and precipitation.
- Land use/hand cover (e.g., agriculture, forest, grassland, wetland, human settlement).

FINDINGS OF THE STUDY: The findings are based on the focused group discussion cum participatory observation techniques besides these techniques' researcher used the interaction method, interview method, observational methods and open-ended questionnaire method.

According to the objective's researcher find out the various activities among the santhal women which have high relevant of the resource'smanagement Strategies in respect of natural resources:

DIAMONTION OF RESOURCE MANAGEMENMT STRAGIGY PRACTICES BY THE SANTHAL WOMEN:

S.L.NO.	Agriculture based on the indigenous practices.
01	Animal husbandry based on the indigenous knowledge system.
02	Forest resource management
03	House management
04	Land resource management
05	Water resource management
06	Environmental resource management
07	Family Resource management
08	Pleasure time management/Leasuretiming
09	Relationship management
10	Food distribution

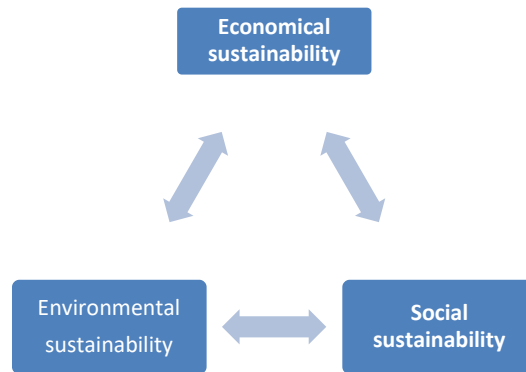
SANTHAL WOMEN AND NATURAL RESOURCE MANAGEMENT TECHNIQUES:

S.L.NO.	Santhal women	Natural resources management techniques
1	Wood work	Prep lumber with hand tools/bamboo work.
2	House building	Mud and Cowdung mixture with soil.
3	Land cultivation system	Cultivation with Plunging material such as 'hal,junhal ,moi.'
4	Land fertilizer techniques	Technique for cultivating their land, they deposit their cow dung and wastage material in small whole after that they used it for fertilizing the land for cultivation
5	Tree plantation	Migrant labor plays an important role in the planting of many santhal trees and biological technique for cultivation.
6	Child rearing process	Raw halud with oil mixing use for child care. Through this mixing screen designed, well screen, immune power build and in this way santhal women develop indigenous medicinal practice for child care.
7	Home industry	Product various material in their home industry like langol, jharu, jhuri, dhenki, kula, chatai, topi,,madur,khat.
8	Women's education & their social status.	The inter-communal status of women's education at the village level has deteriorated
9	Seed preservation	Preservation of food grains with local resource.
10	Medicine prepare	The santhal women are well accustomed for preparing the indigenous medicine. they utilized many local resources as a medicine such as leaf of a tree, root of tree, seeds mixing different root and other element like oil.Oil seeds like 'jara seed, Kachra seed, master seed etc.
11	Food Preparation techniques	Santhal women have uniqueness to prepare their food in a traditional way. They have unique ways to sustained and preserved the food.
12	Utilization of Forest Resources	Santhal have unique knowledge system and sensitive perception towards nature, land and forests and they deeply involve with the natural resource protection withy humanity.
13	Peace management Methods	The santhal are the peace living tribe they want to live with peace and prosperity with the nature and natural environment. With the long-time interaction with santhal researcher have many insight regarding santhal women and their peace living tactics such as Santali songs hold deep value for peace building.
14	Animal nurturing Science	Through the Trial and error and long-term perception to the animal, santhal women developed a unique involvement to the animal and they are able to understands the abnormality of the animal health, behavior and situation.

Table:1

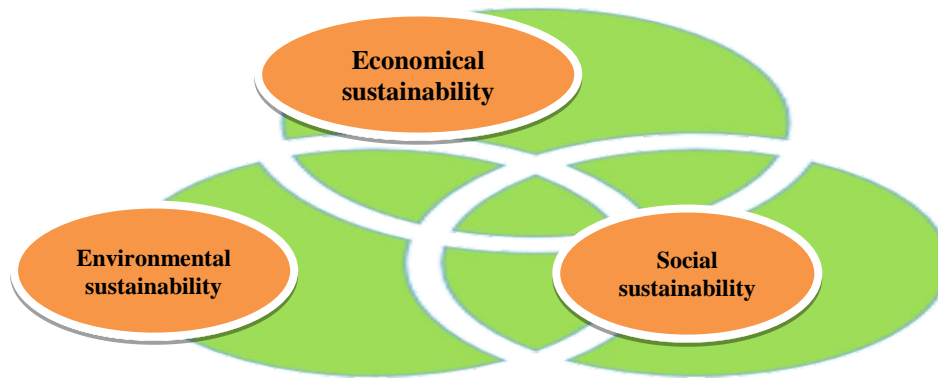
Natural Resource Management in the context of Sustainable Development:

- a. Social sustainability.
- b. Economical sustainability.
- c. Environmental sustainability.



Indigenous knowledge practiced by the santhal community for S.D.	Used for sustainable development.
Family structure	Social sustainability
Land fertilizer	Environmental & economical sustainability
Santhal medicine	Environmental & economical sustainability
Medicine prepare	Economical sustainability
Join family	Social sustainability
Women's education & their social status.	Social sustainability
Social relationship	Social sustainability
Child rearing	Social, economical & environmental sustainability
House building	Economical & environmental sustainability
wood work	Economical sustainability
cultivation system	Economical sustainability
Food preservation	Environmental & economical sustainability
Indigenous techniques	Social, economical & environmental sustainability
Tree plantation	Environmental & economical sustainability
Soil erosion preventive technique	Environmental sustainability
Art & Craft	Economical & environmental sustainability
Water preservation & purification	Environmental sustainability
Natural fertilizer system	Environmental sustainability
Natural painting(used natural colour)	Environmental sustainability
Seed preservation	Economical sustainability
Resource collection & preservation process	Economical & environmental sustainability
Transporting system	Economical sustainability
Nature study or insight to nature	Social, economical & environmental sustainability

This diagram show that the inter relationship of the various deamination of sustainable development.



Conclusion: On the basis of four findings, it was noticed that the Santhal women have deep knowledge regarding natural resource management techniques and these are traditional forms of knowledge, highly relevant in many contexts: nature, environment, family and housing, economical and other aspects. These practices also enhance modern management practices particularly in Indian perspectives of management. Besides these benefits of resource management, Santhal women and their natural resources management process also help to attain sustainable development in the context of environment, economy and society and Sustainable Development Goals can be achieved through this knowledge system.

References:

- Sahoo, Rajan, Kumar. (2010). Tribal Development in India, Mohit Publication, New Delhi-110002.
- Barasa, D. W. (2001). Indigenous knowledge systems and sustainable development in Africa, a case study on Kenya.
- Bodding, P.O. (1925). Traditions and institutions of Santhals, New Delhi, Gyan Publishing House.
- Dube, A. M. & Musi, P. J. (2002). Analysis of indigenous knowledge in Swaziland: Implications for sustainable agricultural development, publishing by the African technology policy studies network P.O. Box 10081, 00100 General posts.
- Gonzalez, O.J. (1966). Formulating an Ecosystem Approach to Environmental Protection. Environmental Management.
- Chopra, P. (2017). Deconstructing a Colonial Legacy: An Analysis of Indian Secondary Education Policy. Italian Journal of Sociology of Education, 9(2), 88-103. doi: 10.14658/pupj-ijse-2017-2-5
- Aggarwal, J. C., & Agrawal, S. P. (1989). National Policy on Education: Agenda for India 2001. Concept Publishing Company, A/15-16, Commercial Block, Mohan Garden, New Delhi-110059, India.
- Batra, Poonam. (2005). Voice and Agency of Teachers: The Missing Link in the National Curriculum Framework, 2005, EPW, October 1-7, pp. 4347-4356.
- Aithal, P. S., & Aithal, Shubhrajyotsna (2020). Analysis of the Indian National Education Policy 2020 towards Achieving its Objectives. International Journal of Management, Technology, and Social Sciences (IJMTS), 5(2), 19-41. DOI: <http://doi.org/10.5281/zenodo.3988767>
- Te Molder, H.F.M. & C. Leeuwis. (1998). Overheid en nieuwe media: de belofte van interactiviteit. In: V. Frissen & H.F.M. Te Molder (Eds), Van Forum tot Supermarkt? Consumenten en Burgers in de Informatiesamenleving, pp. 71-82. Acco (Academisch Coöperatief v.v.), Leuven.
- Holdgate, M. (1999). The Green Web, Earthscan, London. 308 pp. [This book provides an overview of 50 years of conservation effort throughout the world, and a detailed account of the evolution of the World Conservation Union (IUCN).
- Nadeau, L. W. (1997). EPA Effectiveness at Reducing the Duration of Plant-Level Noncompliance, Journal of Environmental Economics and Management 34: 54-78.

Appendices:

