The Indigenous Knowledge and Development Monitor is à publication that promotes the exchange of information on indigenous knowledge as it relates to sustainable development. The Monitor is produced by the Centre for International Research and Advisory Networks (CRRW/Nuffic) in cooperation with the established indigenous knowledge resource centres (see page 36).



Indigenous Knowledge and Development Monitor

Editorial

This last issue of the Monitor in 1995 contains articles covering a wide range of topics in various disciplines and policy sectors, and from various parts of the world. Sri Lanka is featured with traditional tree-crop practices, and there are articles on ethnoveterinary practices in Cameroon, a craft taxonomy used by the Yoruba in Nigeria, and spatial crop growth variability in Western Niger. As usual we welcome your comments on these articles, but most of all we are eager to hear your reactions to two specific articles in this issue.

One is the article by Dr Kroma, 'Popularizing science education in developing countries through indigenous knowledge'. Dr Kroma argues that science and mathematics would be more popular if course content reflected the indigenous knowledge of local communities. Please let us know your opinions about Dr Kroma's assertion.

The other is the article by Dr Agrawal, 'Indigenous and scientific knowledge: some critical comments'. Dr Agrawal submitted his article in an attempt to generate debate on the concept of indigenous knowledge itself. He suggests that several contradictions and conceptual weaknesses are present in most of the writings on indigenous knowledge. Distinguishing 'indigenous' and 'Western' as two types of knowledge is not only potentially ridiculous, Dr Agrawal argues, but also counterproductive for those who believe that indigenous knowledge has a contribution to make to sustainable development. Not only are Dr Agrawal's views stimulating, but his question is basic to our understanding of the relationship between knowledge and development. We would very much appreciate your views and experiences on the subject.

The Monitor, and other newsletters, can play a role in setting an agenda for research that contributes to a better understanding of indigenous knowledge and its application to activities for sustainable development. We therefore ask those who submit contributions to the Monitor also to include suggestions for research needs and priorities. In fact, we would like to start a new section in the journal. Your suggestions for a new research agenda, and any ideas you have on how the Monitor could be used as an instrument for setting the research agenda, are therefore most welcome.

We would also like to start a new series of book reviews. The idea is to give special attention to one recent and substantial publication which will generate debate on a special topic. This issue of the Monitor contains a review of Jules Pretty's impressive book *Regenerating Agriculture*. We invite you to send the editor your suggestions for subsequent books to be reviewed in this way, and names of people who could write those reviews.

The publication of this last Monitor issue of the year coincides with the launch of the electronic version of the Monitor. In previous issues we wrote about our pilot projects with CLESIN (Michigan, USA), ITTAP (Iowa State University, USA) and LEAD (Leiden University, the Netherlands). Now we have succeeded in making all issues of the Monitor electronically accessible, and available through the Netherlands organization for international cooperation in higher education (Nuffic). Nuffic is providing the necessary infrastructure and technical support.

We have chosen also to publish an electronic version of the Monitor in order to fully exploit the Monitor as an instrument for active networking. To cover a wide readership, we have made the Monitor accessible both through the World Wide Web and Gopher. The Web site is http://www.nufficcs.nl/ciran/ikdm. The Gopher address is: gopher.nufficcs.nl. All future issues will be available electronically as well as in print. We are now looking into possibilities for bringing other information on indigenous knowledge on line as well. Any suggestions, remarks or comments are welcome and greatly appreciated.

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Indigenous Knowledge and Development Monitor

The Indigenous Knowledge and Development Monitor is published three times a year, preferably in two regular issues and one special issue,

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Subscriptions

Subscriptions to the Monitor are free except for persons living in the USA, Canada, New Zealand, Australia, Japan and Europe. Subscription for USA and Canada: US \$ 27.00. Subscription for Europe, New Zealand, Australia and Japan: Dfl 40.00.

Contributions

The next regular issue of the Monitor will appear in April 1996. Contributions for this issue should reach the editor before 15 February 1996.

ISSN 0928-1460

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The opinions expressed in the Indigenous Knowledge and Development Monitor do not necessarily reflect those of CIRAN/Nuffic.

This publication was made possible in part by a grant from the Directorate General for International Cooperation of the Netherlands Ministry of Foreign Affairs.



- an instantent for the exchange of information,
- a platform for debate on the concept of indigenous knowledge in a variety of disciplines;
- an overview of activities in the field of indigenous knowledge and sustainable development.

The Indigenous Knowledge and Development Monitor has two sections: Articles and Communications. The articles reflect the state of the art of indigenous knowledge in various policy sectors and disciplines by presenting information on:

- research: study of indigenous knowledge systems, research methodology, research needs, research results, cooperation in research, and organizational aspects of research;
- theory and practice: the interface of indigenous knowledge and scientific knowledge, and the use of research results in the preparation and implementation of development projects;
- policy: indigenous knowledge as an area of interest and a policy instrument for donors, international organizations, governments, voos and development organizations.

The section Communications is divided into sub-sections: Resource centres, Research, Conferences (coming and past), Networks, Calls (for information and cooperation, papers and research proposals), Databases, Publications, and Films and audio-visual devices. The major function of this section is to disseminate information, to inform the broader public about various local initiatives and activities, and to stimulate national and international cooperation.

CIRAN/Nuffic produces the Monitor in close cooperation with indigenous knowledge resource centres in Brazil, Burkina Faso, Cameroon, Canada, Georgia, Ghana, India, Indonesia, Kenya, Madagascar, Mexico, the Netherlands, Nigeria, the Philippines, South Africa, Sri Lanka, Tanzania, Uruguay, the USA and Venezuela. The editorial board of the Monitor is responsible for the editorial policy. Corresponding editors have an institutional base in the various ik resource centres. Associate corresponding editors are similarly affiliated with organizations that are active in the field of indigenous knowledge, among other things. The editorial board and CIRAN/Nuffic, and for coordinating the production.

At present the hard copy of the Monitor is distributed to 3200 recipients in 120 countries. All individuals who fill out a questionnaire are listed as recipients of the Monitor. Thanks to grants from Nuffic and IDRC, the Monitor could be provided free of charge in 1993 and 1994. In 1995, however, recipients living in the USA, Canada, Europe, Japan, New Zealand and Australia are asked to pay for their subscriptions. People living in all other countries, who may not be in a position to pay, will continue to receive the Monitor free of charge.

The Monitor is published three times a year, preferably in two regular issues and one special issue. The first issue of the Monitor appeared in February 1993. CIRAN has run out of copies of Volume 1(1-3) and Volume 2(1-2).

The themes of the two special issues to date have been:

- Proceedings of the international conference 'Indigenous knowledge and sustainable development', which took place in the Philippines. This conference resulted in recommendations and an action plan for the international network for indigenous knowledge and development.
- Women and indigenous knowledge, and gender and indigenous knowledge. This issue was edited by Dr Maria E. Fernández and Drs Akke W. Tick.

Suggestions for themes for future special issues of the Monitor are welcome. They can be sent to the editor.

Guus W. Von Liebenstein Director, CIRAN Akke W. Tick Editor, IK and DM

Learning from craft taxonomies: development and a Yoruba textile tradition.

The resilience of Yoruba indigenous hand-woven cloth industries has been proven again and again, as forces of change have tested the readiness of weavers to adapt to shifts in taste, competition from outside markets, changing technologies, and the lure of modern-sector occupations. Although the textile taxonomy presented in this article is preliminary and still in progress, it is an example of indigenous knowledge in action, where choices are constantly being made on the basis of contemporary tastes and markets.

he value of eliciting taxonomies to reveal the local knowledge of local communities about their natural and cultural world has been appreciated by anthropologists and developers for several decades (e.g., Conklin 1972; Spradley 1979; Brown 1984; Werner 1987; Berlin 1992). In an early statement on the significance of indigenous knowledge, Brokensha, Warren, and Werner (1980) stressed the importance of 'ethnotaxonomies' for development¹. They admit that while full ethnotaxonomical studies require 'formidable resources', 'there are simple methods to elicit the main features of an indigenous classificatory system', and, they add, 'it is not essential to drink deep: a little knowledge can be put to good use' (Brokensha et al.; 1980:3). The study described below illustrates how gratifying 'a small drink' of indigenous knowledge, as reflected in taxonomic research, can be to scholars, developers and the local community.

Taxonomies and the crafts

Development-oriented taxonomic research has taken an applied stance by directing attention to the use of indigenous knowledge in decision-making, particularly in agricultural contexts where taxonomies on crop varieties and soil types play a vital role. The taxonomies that underlie craft production, by contrast, have been neglected, because the focus has been on the introduction of new technologies in development rather than encouraging the old. These taxonomies receive little attention, despite the role they play in structuring the indigenous knowledge which underlies handicraft industries in the informal sector of developing economies². In the light of that role, they are well worth study.

Craft taxonomies differ significantly from those used to classify the natural world. As structured knowledge, they are more variable and dynamic than classification systems for plants, soils and animals; the labels in a craft taxonomy refer to 'artifacts', which are products of human behaviour and intent and gain new meaning within an ever-changing cultural context. A folk classification system that encapsulates the knowledge needed to create the products of a craft tradition must favour continuity if the tradition is to continue over time, but it must also be flexible enough to incorporate innovation and change. The introduction of new technologies and materials, consumer goods and cultural influences from outside greatly affect indigenous craft production. Crafts can change so quickly that the old and the new become linked in a single indigenous knowledge system.

Research

The asc-oke handwoven cloth industry of the Yoruba of southwestern Nigeria is an indigenous craft tradition which remains vigorous in a world of rapid change. The cloth taxonomy presented here, elicited from Yoruba master weavers in 1993-1994, demonstrates how indigenous knowledge is structured and yet is ever-expanding to integrate the new. In 1993 Wolff and Wahab began to document the emic labels which Yoruba weavers attach to different types and patterns of Yoruba textiles, as part of a larger project to discover the taxonomies attached to the full range of Yoruba arts. Weavers were interviewed in several towns noted for indigenous textile production in southwestern Nigeria. Questionnaire interviews were used to elicit the terms used to label and talk about the wide range of strip cloth made by the weavers, and the criteria they used to distinguish types and assess the products. Wahab, drawing upon his own expertise as a member of a weaving lineage and a trained craftsman, played a key role in finalizing the taxonomy. We consider this aso-oke taxonomy to be a preliminary and simplified version of what will ultimately be a much more elaborate model, incorporating the knowledge not only of master weavers but of traders and consumers as well.

Among the Yoruba of southwestern Nigeria, aso-oke (narrow-strip cloth woven on the horizontal loom³) has retained its economic and cultural importance for well over two centuries. Today, aso-oke is being produced by the ton to meet the demands of rural and urban Yoruba and other ethnic groups, who use it for indigenous clothing. While new materials (notably metallic lurex thread) have been added to produce a highly modern strip-cloth called shain-shain, the basic form of aso-oke has changed little over the centuries. The resilience of indigenous aso-oke textile industries has been proven repeatedly, as forces of cultural change have tested the craftspersons' readiness to adapt to continuous shifts in taste, competition from outside markets, changing technologies, dwindling local supplies of raw materials, inflation, intrusive government development policies and projects, and the lure of modern sector occupations, which draw away the work force.

The capacity of craftspeople to integrate old and new traditions into a single classification system became evident after only a few interviews with Yoruba weavers on the attributes of different *aso-oke* types. The weavers distinguish between two basic types of narrow strip cloth, according to the material used in weaving:

- aso owu riran (literally 'cloth of thread from spinning'), which refers to the older types of strip cloth made with handspun thread;
- aso owu eebo (lit. cloth of thread from Europeans), which refers to the newer types of strip cloth made with machine-spun thread.

The value of eliciting taxonomies to reveal the local knowledge of local communities about their natural and cultural world has been appreciated by anthropologists and developers for several decades.

Craft taxonomies receive little attention, despite the role they play in structuring the indigenous knowledge which underlies handicraft industries in the informal sector of developing economies

Aso owu riran

The textile types included in the category of *aso* owu riran are historically older and have a deep cultural significance. Garments of this category are regularly worn by kings, chiefs, priests of the indigenous cults, and individuals who value the traditions of the past. They are still considered the most appropriate choice to express one's Yoruba identity on occasions of great consequence. Family rites of passage, such as marriages, naming ceremonies for infants, and funerals provide opportunities for people to wear *aso owu riran*.

When asked to enumerate textile types of aso owu riran, three labels initially appeared on the list of every weaver: aso sanyan, aso etu and aso alaari. The colour of the yarn is of great importance in identifying these subtypes. Sanyan is the natural tan colour of wild silk, etu yarn is dyed a deep blue with indigenous indigo dyes, and the red of alaari can be produced with camwood or other local vegetable dyes, although there is little evidence that indigenous red dye is being used nowadays. While thin stripes of additional colours may be added, the base colours of beige, dark blue and red are constant. Once the yarn is woven into strips, it is these colours that take primacy in the identification of these three cloths by both weavers and consumers. The colours parallel the three basic colour terms of the Yoruba language and in indigenous belief are thought 'to possess moral as well as aesthetic qualities' (Euba, 1986)

To wear garments of sanyan, etu and alaari which display these colours is the ultimate visual statement of ethnic pride and self-worth for many Yorubas. However, the time-honoured aso owu riran made with handspun thread is becoming increasingly rare. Weavers complain that working with handspun thread slows down the weaving process. It is more difficult to work with because it is not as strong as machine-spun thread, is prone to tangling, and does not provide the smooth-textured cloth which contemporary consumers prefer. Today, cloth made with handspun thread is produced only on commission and sold at significantly higher prices than the cloth made with machine spun thread,

Despite the decline in production, there is still a continuing, though limited, demand for sanyan, etu and alaari for clothes to be worn on occasions where individuals want to express their 'Yorubaness'. In weaving centres such as the town of Iseyin, weavers now produce aso owu riran in the familiar colours, sometimes even using natural dyes, but using machine-spun cotton thread. This cloth sells as sanyan, etu and alaari in the markets, where few consumers are concerned about differences in threads. In the popular mind the colour takes precedence over the materials used in production. However, the weavers distinguish between the two when discussing cloth types and indicate the difference on their mental templates, the internalized rules of production associated with particular types of aso-oke which are part of the weavers' craft knowledge system. For example, a cotton cloth of machine-spun thread dyed with vegetable colours to resemble the natural colour of the native silk of sanyan is called kugu. Like sanyan, kugu is used to make clothing for important social events and, because of its colour, projects the same culturally important message. Sanyan made from wild silk and kugu made from dyed cotton are of a distinctive colour, which has a cultural significance quite unlike any of the colours used in more modern aso owu eebo cloth types. The similar colour and function override considerations of materials, so that in the taxonomy, kugu has become a kind of sanyan.

Aso owu eebo

The second major category of handwoven cloth,

aso owu eebo, made with pre-dyed machine-spun thread, is made in a variety of colours. However, thread, not colour, is the prime attribute used to identify the different types. Three major categories are distinguished, each with a distinctively different surface texture, depending on the kind of thread used. Aso olowu, made from cotton thread, has a matte finish similar to the older handspun types, but smoother. Olowu may be a plain weave with stripes (oboro), or it can be made with weft-float designs on one surface or double-sided patterns incorporated into the weave (olona). Aso shain-shain, made with lurex and cotton thread⁴, is characterized by a reflective, slightly rough surface that catches the light and sparkles. Aso siliki is a heavy cloth made with rayon or silk thread, which produces a smooth lustrous surface. Note that as the threads used in weaving begin to vary significantly from the native cotton and indigenous silk, English loan words are used as labels. In contemporary Nigeria, the use of English indicates that a person has chosen to be linked to the modern world. Thus we have textile types whose very labels appeal to this desire for modernity--shain-shain ('shine-shine') and siliki (silk).

Today, in the mid-1990s, shain-shain is the most fashionable of the aso owu eebo cloth types. Around the 1960s, shiny lurex thread began to be incorporated into cotton aso-oke olowu in the form of thin stripes. Initially, small amounts were brought back from Egypt by Muslim weavers who had gone on a pilgrimage to Mecca. The amount of lurex thread available gradually increased, until the shiny thread dominated the surface of the cloth, leading to the production of a new cloth type, aso-oke shain-shain. Considered a lightweight modern cloth, shain-shain is popular for its connotations of modernity; when tailored in indigenous clothing styles, it remains distinctly Yoruba. It is produced in endless varieties, and fashions in colour and stripe combinations come and go. Novelty is prized and innovation rewarded.

One innovation, widely copied, involves using a twisted weft of cotton and lurex thread. The result, a cloth which sparkles more brightly than 'ordinary' shain-shain, was dubbed ojunsoro which translates to 'the eye is winking'. It quickly became popular with the public and was widely copied by many weavers, although there were some who merely used the name, but neglected to incorporate the technological innovation. Another recent novelty involves crossing lurex warp and weft threads in small areas to produce bright metallic patterns. In 1993 this distinctive cloth was christened shain-shain jakadi, linking it to the prestigious and expensive jacquard import cloth popular at that time. The speed of change in fashionable textile types is demonstrated by the emergence of yet another shain-shain type: Jakadi satin, which has larger areas of metallic patterns, made its appearance in 1994. This was in response to the growing popularity of machine-woven satin jacquard, an even more prestigious and expensive import cloth which only the most wealthy could afford to buy. Attaching the labels of jakadi and jakadi satin to shainshain cloth types called the consumers' attention to a form of popular prestige cloth which is cheaper and more widely available.

The labels attached by weavers to their newer cloth types such, as *shain-shain jakadi* and *satin* are evidence of the degree to which the craftspeople understand their market. Contemporary Yorubas are very much attune to fashion, and this is reflected in a never-ending variety of textiles available for clothing. The markets and shops throughout Yorubaland stock both imported and indigenous fabric, and machineand hand-crafted textiles. Experimentation with new materials and labelling the products of such innovations are indicative of the adaptive strategies



Craft taxonomies differ significantly from those used to classify the natural world.

The aso-oke handwoven cloth industry of the Yoruba of southwestern Nigeria is an indigenous craft tradition which remains vigorous in a world of rapid change.

The weavers distinguish between two basic types of narrow strip cloth.

The Yorubas' appreciation of fashion is expressed in the variety of textile types available today.

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Endnotes

Recent studies on the importance of indigenous taxonomies are included in The cultural dimension of development: Indigenous knowledge systems edited by D.M. Warren, L.J. Slikkerveer and D. Brokensha and published in 1995. These include B. Rajasekaran and D.M. Warren 'Indigenous taxonomies and decision making systems of rice farmers in South Asia' (202-210); S.R. Babu, D.M. Warren and B. Rajasekaran 'Expert systems for indigenous knowledge in crop varietal selection' (211-217); M.A. Altieri and A. Yurjevic The Latin American Consortium on agroecology and development (CLADES) Fostering rural development based on indigenous knowledge' (458-463); E. Mathias-Mundy and C.M. McCorkle 'Ethnoveterinary medicine and development: A review of the literature' (488-498).

² The pioneering work by Warren and Andrews (1977) on Akan craft remains a unique taxonomic study of the living craft traditions of an ethnic group. that characterize the production behaviours of the Yoruba weavers of *aso-oke*. The labels play a role in keeping their products competitive, in the face of the challenges now facing the market for indigenous cloth in the form of new imports and the products of Nigeria's industrial textile industry.

'Fashion names,' when attached to new patterns of aso owu eebo, can play a significant role in increasing the desirability of particular cloth patterns for aso-oke consumers. The labels increase the visibility of a particular type in the market; consumers can ask for it by name, while at the same time the label provides a verbal cue that activates the mental template for the weavers to replicate it or use it as a basis for innovation. Fashion names can refer to many things, e.g., colours ('rainbow'), historical events ('keep right'), an important dignitary ('ododo Muritala'), social types ('onibeji, parent of twins'), a state of being ('miliki, pleasure'), a place ('Abuja') and modern trends ('cocaine'). Fashion names aid in merchandising cloth by linking it to local events, but are very much a phenomenon of the here-and-now. The fashion name 'keep right' was a reference to a change in national road laws in the early 1970s. Local popularity is reflected in the label 'Calenda', a reference to a cloth that became popular in the early 1990s after it was seen in the portrait of a local dignitary on a calendar. 'Abuja', a reference to the new Nigerian capital city built in the 1980s at great expense, is used to label an extremely expensive double-sided reversible cloth with weft-float patterns (olona oju meji). Fashion names not only pinpoint certain patterns in time, they are also evidence of the fleeting nature of the patterns of aso owu eebo which come and go, as fashion dictates. In contrast, there are no fashion names for the various types of aso owu riran cloth, for these represent a kind of anti-fashion textile whose unchanging attributes are prized for their timeless quality and deep cultural significance.

³ Woven on the narrow-band horizontal loom, the 4-inchwide strips are cut into 7-foot lengths to be used in the construction of clothing. The wide choice of types and colours of thread used to make up patterns of warp and weft stripes, together with the weft float patterns, allow the weavers to devise infinite varieties of patterns which dictate of patterns which dictate of follow fashion.

Shain-shain is a plain-weave cloth the cotton thread weft adds strength, but the lurex warp threads are what show on the surface of the cloth.

Level V labels are not discussed in detail in this article. This category refers to secondary weaving processes which alter the surface of the textile for decorative affect.

Conclusion

The Yorubas' appreciation of fashion is expressed in the variety of textile types available today; but they are also drawn to the historically significant textiles that express anti-fashion and pride in cultural heritage. This fondness for both old and new, traditional and modern, is reflected in the elicited taxonomy of Yoruba textile types. The taxonomy that developed from our research on Yoruba textiles thus far is evidence of the ability of craftspeople to respond to 'a changing economy, technological innovations and modernizing tastes. The aso-oke categories reveal a continual re-invention of the craft, in answer to a changing cultural milieu. The taxonomy exemplifies indigenous knowledge in action, where constant choices are being made on the basis of contemporary tastes and markets.

A craft taxonomy, whether for textiles or any other indigenous art, is an important document for the developer. First, the history of a craft is exemplified in the juxtaposition of categories based on old and new techniques, materials and product types. Secondly, the taxonomic labels, with their defining attributes, encapsulate the 'know-how' of a craft. As verbal cues, they trigger mental templates to guide production, and underlie all decision-making pertaining to that craft. A taxonomy of a craft reveals the state of that art in the ever-changing contemporary setting. As a means of gaining insight into the dynamics of craft industriês in a development context, the eliciting of taxonomies can prove invaluable.

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