

Development Policy Research Unit
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Eco-labelling: Overview and Implications for Developing Countries

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Foreword

The Development Policy Research Unit (DPRU), located within the University of Cape Town's School of Economics, was formed in 1990 to undertake economic policy-oriented research.

The aim of the unit's work is the achievement of more effective public policy for industrial development in South and Southern Africa.

The DPRU's mission is to undertake internationally recognised policy research that contributes to the quality and effectiveness of such policy.

The unit is involved in research activities in the following areas:

- labour markets and poverty
- regulatory reform
- regional integration

These policy briefs are intended to catalyse policy debate. They express the views of their respective authors and not necessarily those of the DPRU.

They present the major research findings of the *Industrialisation Strategy Project* (ISP). The aim of the ISP is to promote industrial development in the *Southern African Development Community* (SADC) through regional economic integration and cooperation. It is a three-year project that commenced in August 1998 and is funded by the *International Development Research Centre* (IDRC). Ultimately, this project will identify the policies and programmes that support regional interactions that contribute to the industrialisation of SADC national economies.

Eco-labelling: Overview and Implications for Developing Countries

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Introduction

This policy brief aims to provide a brief introduction to eco-labelling and some of the implications that the presence of eco-labels may have on developing countries. Eco-labelling by implication links environmental with trade and market access issues.

Eco-labels (or environmental labels) are a guide for consumers to choose products and services that are deemed to be less harmful to the environment than other products within the same category. Eco-labels are designed to encourage industries to produce more environmentally-friendly products through consumers' purchasing power - which translates into a "bottom-up" solution. Although the distribution of eco-labels is largely concentrated in the highly industrialised countries (mainly the European Union (EU)), they may nonetheless have increasingly significant future consequences for developing countries, especially in terms of their trade with developed countries.

What are Eco-Labels?

An eco-label is a form of **legally protected label** that is applied to (or certification awarded to) a product or service, warranting that it complies with certain pre-determined environmental and (sometimes) social criteria. It thus makes a positive statement about the **environmental aspects** of a product, and is a reward for the environmental leadership embodied in such a product. Eco-labels are policy instruments that attempt to communicate distinctions in similar products based on their relative environmental impact.

As eco-labelling is, in fact, a form of product differentiation, products conforming to and bearing an eco-label are likely to receive a **premium** in their respective markets. This naturally depends on the environmental awareness of consumers. The credibility of the relevant eco-label, and the market for eco-labelled products, also play important roles in the success of an eco-label.

Most eco-labels are further characterised by being **independent** from commercial interests by being administered by not-for-profit authorities. They may not directly discriminate between applicants from different countries by only granting access to the labels to certain countries or regions.

Eco-labels are potentially attractive instruments informing consumers (including institutions and governments that consume input materials and products) about the environmental impact of their purchasing decisions, while simultaneously providing producers with a tool for extracting market place preference and thus market share.



Definitions Used by International Organisations

Although a number of definitions and descriptions exist for eco-labels, they can be generically classified into one of two categories: (1) self-declaration claims and (2) independent third-party claims. They can be both '**private**' and '**public**' (government sponsored) schemes.

Table 1: Main Types of Eco-Labelling Programmes

Type of Programme	Private & Voluntary	Public & Voluntary
Self-Declaration Claims	"ozone-friendly"; "recyclable"	"ozone-friendly"; "recyclable"
Independent Third-Party Verification	Öko-Tex; U.S. Green Seal	E.U.Eco-Label; Nordic Swan; Blue Angel

Self-declaration claims are eco-labels placed on a product by the manufacturer, retailer or marketer of such product, and may be made on a single attribute or an overall assessment of the product. Product claims could include "environmentally friendly", "ozone friendly" and "degradable". However, these claims are usually not independently verified.

Independent third-party claims, on the other hand, are based on compliance with pre-determined criteria, which are independently verified by a competent authority (usually government-sponsored). The criteria for eco-labels based on independent third-party claims are usually built on a product life-cycle approach.

The **International Organisation for Standardisation (ISO)** has adopted eco-labelling as an important tool in obtaining environmental sustainability of business. It has introduced the ISO 14000 series of environmental standards, with the ISO 14020 series dealing exclusively with environmental labels and declarations.

- **Type I** environmental labels, i.e. "voluntary, multiple criteria-based third-party practitioner programmes that awards labels claiming overall environmental preference of a product within a particular product category based on life-cycle considerations". Well-established eco-labelling schemes falling into this category are the EU Flower (European Union Eco-Label), Green Seal (U.S.), The Nordic Swan (Nordic countries), the Blue Angel (Germany) and Environmental Choice (Canada).
- **Type II** environmental labels are those that "consist of informative self-declaration claims", made without independent third-party certification by, for example, "manufacturers, importers, distributors, retailers or anyone else likely to benefit from them". The absence of third-party verification is likely to count against wide-spread acceptance of such schemes by consumers.

The **US Environmental Protection Agency (EPA)** criteria to define eco-labelling programmes include the following:

- whether the programme relies on **first-party or third-party verification** (i.e. own verification or independent source that awards labels to products and services based on certain environmental criteria);

- positive, negative or neutral labelling programmes (where positive programmes certify that a product possesses certain **preferable attributes**, neutral programmes summarise environmental information about the products, and negative labelling **warns consumers and down-stream manufacturers** about hazardous ingredients contained in the product);
- **voluntary or mandatory schemes** (voluntary typically displaying positive or neutral information, while mandatory programmes usually containing 'negative' information).

Criteria Development for Eco-labels

Eco-labels are usually based on a product life cycle approach, whereby the relevant environmental product criteria are developed following analysis of the environmental impact from raw material usage (so-called "cradle") to final end-use and disposal (so-called "grave"). Life Cycle Analysis (LCA) is therefore frequently referred to as the "cradle to grave" approach. According to the International Organisation for Standardisation, a Life Cycle Assessment (LCA) is a systematic tool for assessing the environmental impacts associated with a product or service to build an inventory of those inputs and outputs, and identify the most significant aspects of the system relative to the objective of the study. LCA considers the environmental impact along the continuum of a product's life (i.e. cradle to grave) from raw materials acquisition to production, use and disposal. The general categories of environmental impacts to consider include resource depletion, human health, and ecological consequences. Generically, the life cycle of a product from raw material extraction to final disposal can be illustrated as follows:

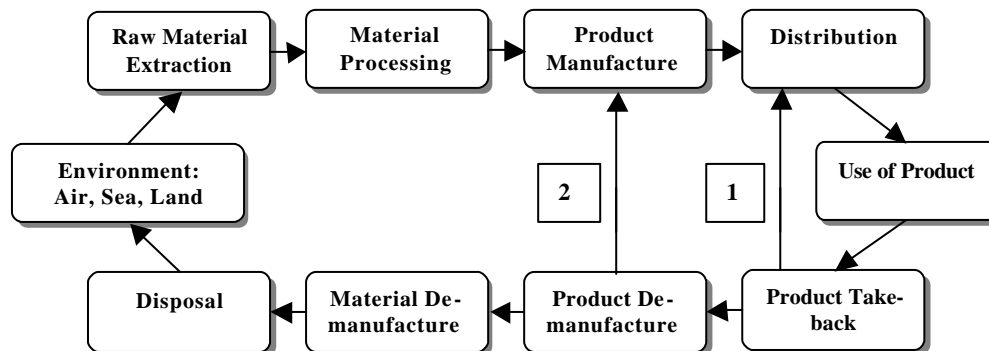


Figure 1: Generic Presentation of a Product's Life Cycle

- Notes:**
1. Direct recycling / reuse
 2. Re-manufacturing of reusable components

Issues relating to eco-labelling have been dealt with by many prominent international trade and environmental organisations, including (but not limited to) the United Nations (UN), the World Trade Organisation (WTO) through its International Trade Centre (ITC) and Committee on Trade and Environment (CTE), the US Environmental Protection Agency (US EPA), as well as the Organisation for Economic Co-operation and Development (OECD) and the International Organisation for Standardisation (ISO).

Identification and Locational Characteristics of Various Eco-labelling Schemes

There are a number of national and private eco-labelling schemes in existence worldwide. 'National' schemes are generally government funded, and eco-labelling criteria have usually been developed for a number of different product categories. 'Private' schemes are usually product or industry-specific and the result of a private sector initiative. An example of a private eco-labelling scheme is the Öko-Tex family of eco-labels, which have been designed specifically for the textile (and clothing) industry and are most widely used in Germany and Austria, although companies in a number of developing countries have obtained this label (including India and South Africa). The focus here, however, is on national eco-labelling schemes, particularly on those found in the Southern African Development Community (SADC) region's traditional export partners.

Table 2: Overview of National Eco-Labelling Programmes and their Dates of Creation

Country / Group	Name of Eco-Labelling Programme	Date of Creation
Germany	Blue Angel	1977
Canada	Environmental Choice Programme	1988
Japan	Eco Mark	1989
Nordic Countries	Nordic Swan	1989
United States	Green Seal	1989
Sweden	Good Environmental Choice	1990
India	Ecomark	1991
Austria	Austrian Eco-Label	1991
Australia	Environmental Choice	1991
Rep. of Korea	Ecomark	1992
Singapore	Green Label Singapore	1992
France	NF-Environnement	1992
Netherlands	Stichting Milieukeur	1992
European Union	European Flower	1992
Croatia	Environmentally Friendly	1993
Thailand	Thai Green Label	1994

Most eco-labelling schemes were developed in the early 1990s, and new product categories are being added continuously. The Europe-wide European Flower eco-label, for example, includes product categories for textiles, footwear, mattresses, paper, furniture (14 active in total, with 9 under development). A number of the developing country exports fall into categories covered by eco-labelling programmes in developed countries.

Some Experiences of Eco-labelling in Developed Countries

Eco-labelling can have various implications on producers and consumers. Some of the implications, such as the possibility of becoming non-tariff technical barriers to trade (TBTs), are discussed later. Following an evaluation of the successes of the eco-labelling schemes operating within the OECD, it was concluded that:

- Anecdotal evidence which suggests that sales of a product have increased after an eco-label has been obtained;
- Some products with eco-labels have achieved significant success in their market, obtaining up to 30% of the market share within that particular product category. Eco-labels have, in such cases, become the *de facto* standard;
- Consumers in most industrialised countries are willing to pay higher prices for products that are more environmentally friendly (especially if such claims are independently verifiable);
- It was found that the success of eco-labelling schemes was positively and strongly correlated with the environmental awareness of that particular country and / or market;
- The importance and success of eco-labels has increased when linked with government procurement;
- Manufacturers have considered eco-labels to be a valuable tool for purposes of communicating the qualities of their product as well as the firm's concern for the environment.

Eco-Labelling: A Potential (Non-Tariff) Technical Trade Barrier, especially for Developing Countries?

Non-tariff technical trade barriers (NTTTBs) are barriers to international trade which are based on a technical (or qualitative) requirement, as opposed to being a formal (import or export) tariff that may be levied on products and services.

Some concerns have been raised by various international institutions, and by many (mostly) developing countries, that eco-labelling, while professing to be environmentally beneficial, is in fact having a negative impact on global trade patterns. This is due to the fact that the demand for and promotion of eco-labelled products in a particular host country (or region) may preclude those countries and industries, where eco-labels are not in existence (or whose existence is not widespread), from successfully penetrating such markets.

To many developing countries, the current debate involving eco-labelling represents another form of industrialised countries blocking out developing country exports. Developing countries fear that stricter product standards relating to environmental criteria are increasingly being used as a trade barrier for their exports, and that these environment-based restrictions are used as an indirect means of protecting "northern" industries. As a consequence, the relative lack of market power that developing countries wield in the markets of their developed counterparts has made the former highly vulnerable to changing market conditions. It should be remembered, though, that developing countries have often had a competitive advantage relative to developed country counterparts due to the absence of thorough environmental controls and environmentally-based resource pricing.

A number of factors may have discriminatory effects on foreign producers, and may pose difficulties for foreign producers obtaining an eco-label for the market (or country) that they are producing for, or may wish to export to in future. The following are important factors that may have an impact particularly on developing countries:

- Eco-labelling is usually based on the **domestic environmental priorities** and technologies of the importing country (i.e. where the eco-label was developed), and may overlook the relevant and acceptable methods of production in the exporting country;
- Eco-labelling criteria may be tailored around an existing **stock of technology**, which developing countries do not have easy access to; developing country producers may have to incur a disproportionately large cost burden to adjust to the eco-labelling requirements;
- Differentials in **environmental infrastructure** (e.g. waste treatment plants) may place a higher burden on developing countries in terms of environmental standards and compliance;
- Suppliers of environmentally friendly (or less hazardous) **input materials** may be more difficult to source from within developing countries where the environmental concerns are different to those in developed countries.

Although eco-labels are frequently seen as technical trade barriers and thus, by extension, not compliant with the WTO's Agreement on Technical Barriers to Trade (TBT, signed in 1995), the wording of the Agreement clearly distinguishes between *technical regulations* and *standards*. The primary distinguishing factor between these two terms lies in their inherent nature: technical regulations are mandatory (and thus enforceable), while standards are voluntary. As most eco-labels are voluntary in nature, they are generally recognised as being standards, and thus (within the scope of the TBT Agreement generally) in compliance with WTO regulations. However, the WTO still calls on governments and organisations around the world to base voluntary eco-labelling schemes on internationally recognised and accepted standards. Here ISO standards play an important role. The WTO issued a draft ministerial declaration ahead of the 4th Ministerial Conference to be held in Doha, Qatar, re-emphasising the fact that eco-labelling efforts should not become disguised trade restrictions and calling on the Committee on Technical Barriers to Trade to expedite its work on labelling.

The reality of the situation is, however, that "upward" pressure in the procurement chain (i.e. end-consumers, retailers and downstream manufacturers) increasingly discriminates against non-complying manufacturers and their products. National authorities can develop complex schemes unsuited to foreign producers. Eco-labels can become barriers to trade, and may increasingly be used as a guise for protectionism. In this way, developed countries may effectively restrict developing country access to their markets.

Options: Development of Own Eco-Labels or Compliance with Existing Programmes

Establishing dedicated national eco-labelling programmes requires entering into a complex process of consultation with a large number of stakeholders. This is necessary to ensure that, beyond merely incorporating the views of all interested and affected parties, the criteria

drawn up for the eco-label are effective and relevant. The degree of general environmental awareness that consumers have in a particular country or region also needs to be considered, as this determines the receptiveness of (possibly) paying a small premium for products that are preferable from an environmental point of view. Where there is an overriding emphasis on price, and all other attributes lag far behind, this may be a considerable barrier to the development (and success) of a national eco-label.

A widely held view is that the market, in countries where consumers (in the broadest sense) are not very environmentally conscious in their purchasing decisions, is generally very limited for eco-labelling. In other words, cost factors far outweigh environmental attributes of a product, especially if a price premium is involved.

A viable alternative is for these countries, particularly where regions such as Europe and North America are important destinations for their exports, to consider complying with a foreign eco-label. Industries in developing countries that are currently (or planning to) exporting to the E.U., may find this option viable, especially since there would be no problems with reciprocal recognition of a national label in a foreign country. It must be noted, though, that this scenario would only be useful as a means of gaining (or protecting) market share in, and access to, foreign markets where the relevant eco-label is applicable. In terms of the EU eco-label, the validity of the label covers all the European states.

Summary

This policy brief attempts to provide a brief introduction to eco-labelling, and some of the implications thereof for developing countries. Due to the vast number of issues relating to this topic, it is only possible to draw attention to some of the more important, mostly non-technical ones. The scientific basis used in developing the various product criteria, precludes one from altogether ignoring the technical issues involved.

Important points to emphasise include the following:

- Eco-labels are a **guide for consumers** (in the broadest sense) to choose products and services that are deemed to be less harmful to the environment than other products within the same category;
- Eco-labels represent a **tool to governments, manufacturers and consumers** to address environmental problems associated with consumer products in a relatively quick and flexible manner;
- There are a **growing number of eco-labels world-wide**, particularly in the more developed countries, where consumers and institutions are generally more environmentally aware;
- There is a **concern**, especially by developing countries, that eco-labels are complex schemes developed by national authorities to limit foreign competition (and become NTTTBs), as labelling product groups often favour domestic products over foreign products and are not always compatible with many of the products in developing countries;

- In the medium- to long-term, eco-labelling may thus have important **consequences for market access** in foreign countries where eco-labelling standards are well developed, and have captured significant market share;
- Countries have the option of developing their **own eco-labels**, or their industries can focus on **obtaining foreign eco-labels** that are relevant in their current (or future) export markets.

References:

European Union (2001). Eco-Label Secretariat, internet: <http://europa.eu.int/ecolabel>

Hyvarinen, A (1999). *Eco-labelling and Environmentally Friendly Products and Production Methods Affecting the International Trade in Textiles and Clothing*; Senior Market Development Office, International Trade Centre; Geneva.

ITC (1996). *Eco-labelling and other environmental quality requirements in textiles and clothing: implications for developing countries*, Trade Development Services, ITC/233/1B/96-II-TP; Geneva.

Loprieno, M. (1997). *The European Union Eco-Label scheme: an environmental policy marketing tool*, Industry and Environment, United Nations Environment Programme (UNEP).

OECD (1997). *Eco-Labelling: Actual Effects of Selected Programmes*, OCDE/GD(97)105; Paris.

Vitalis, V. (date unknown). *Eco-Labelling and WTO Rules*, OECD Roundtable on Sustainable Development.

Taschner, K. (1997). *The European Eco-Labelling Scheme: Implications and Criteria for Textiles and Clothing*, EU Eco-Label Secretariat - Environment Section, Economic and Social Committee; Brussels.

US EPA (1998). *Environmental Labeling: Issues, Policies and practices Worldwide*, Pollution Prevention Division, Office of Pollution Prevention and Toxics, EPA-742-R-98-009; Washington.

UNCTAD (2001). Internet: www.unctad.org

Vaughan, S. (1995). *Trade and Environment: Perspectives of Developing Countries*, Coordinator, Environment and Trade, United Nations Environment Programme (UNEP); Geneva.

Verbruggen et al. (1995). *Environmental Regulations As Trade Barriers For Developing Countries: Eco-Labelling And The Dutch Cut Flower Industry*, CREED Working Paper No 2, International Institute for Environment & Development; London.

WTO (1997). *Eco-labelling: Overview of Current Work in Various International Fora*, Committee on Trade and Environment, Report WT/CTE/W/45.