

An information systems perspective on ethical trade and self-regulation

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Abstract. Increasing numbers of ethical trade initiatives are being launched, reflecting concerns about the limited benefits that globalising trade brings to producers in developing countries. Ethical trade is an information-intensive activity. Yet little is known about the role of information systems in supporting ethical trade. This paper provides a preliminary conceptualisation of ethical trade regulatory information systems. It presents models and issues in relation to both information, and information and communication technologies. Ethical trade – with its voluntary codes and consumer campaigns – also represents a new approach to interaction between market actors. This is the approach of self-regulation, that moves beyond binding state regulation and sanctions to something seen as more appropriate to a globalised, liberalised economy. Findings about information systems and ethical trade therefore also advance our understanding of self-regulation.

1. Introduction

The practice of ethical trade is increasingly moving into the mainstream of development activities, through programmes such as the UK's Ethical Trading Initiative [14]. Ethical trade is seeking to encourage voluntary codes of conduct amongst large producers with subsidiaries or suppliers in developing countries. The codes of conduct and related standards are intended to benefit workers' rights and human rights, and to help meet other social and environmental development goals.

Ethical trade is a form of market intervention practised through self-regulation. Self-regulation is an alternative to the more traditional forms of regulation, such as binding national or international agreements. It allows stakeholders – including government, the private sector, and advocates of ethical trade (such as non-governmental organisations (NGOs) and workers' representatives) – to work together in order to set voluntary standards governing developing country workplaces, and communities, involved in the global supply chain. It also provides collective representation for the values and choices of consumer groups, whilst enabling the power of individual customers to still be exerted in the marketplace.

As one instance of self-regulation, ethical trade initiatives therefore represent a new regulatory mechanism for mediating between producers and consumers [2]. This is a mechanism that is on the increase, not least because it is seen as particularly well suited to the currently liberalising international trade environment [7].

The processing and transmission of information is critical to self-regulation generally, and to ethical trade in particular. Data collection forms the basis of independent monitoring and new forms of social auditing that assure the accountability of ethical trade. Accordingly, information must be processed and

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made available to stakeholders and, critically, disseminated and publicised in order to inform consumer choices. Such information handling is increasingly dependent on the implementation of information and communication technology-based (ICT-based) systems. Large companies piggy-back ethical trade data flows on the back of the complex management support systems and global communications they use to control their supply chains. Consumers increasingly use the Internet to access product-related information and to conduct transactions. Ethical trade advocates act as intermediaries and use such networks to build and maintain ethical trade campaigns.

Yet very little is known about the role of information or of ICTs in the functioning of ethical trade. This paper addresses this issue; aiming to provide the first overview of information systems within ethical trade. Based on a review of current ethical trade cases and literature, it will examine the way in which information flows support the self-regulatory processes of ethical trade; and will also examine the potential benefits and issues that arise with increasing use of ICTs in ethical trade.

Providing a better understanding of information systems in ethical trade is not merely an academic exercise of knowledge-building. It also has practical relevance. Information systems are integral to the workings of ethical trade. Poor IS design will therefore hamper the achievement of ethical trade goals which, in turn, will have a negative impact on the development goals with which ethical trade is associated. In addition, if successful, the use of ICTs in ethical trade systems will represent a clear contribution of the new technologies to development; a contribution that, to date, has sometimes been a little hard to find.

2. Understanding ethical trade

2.1. *The context of global trade*

Before moving on to look at the informational aspects of ethical trade, let us first investigate the origins and place of ethical trade in the development process, starting with the context of global trade.

We live in a world of increasing global trade supported by three important and mutually reinforcing trends [12,19]:

- First, liberalisation. At the international level, successive rounds of multi- and bi-lateral trade negotiations – most notably within the framework of the World Trade Organisation (WTO) – have witnessed ever-increasing liberalisation of the rules governing international trade. At the national level, partly due to leverage from the WTO and other international organisations and partly due to changes in domestic political economies, developing country governments are liberalising their import and export regimes; swapping the import-substituting policies of old for export-oriented strategies that encourage foreign investment.¹ All of this either reduces barriers or increases incentives to trade.
- Second, globalisation. Inherently, globalisation – the growing global-scale inter-connection and integration of economic and social activity [26] – goes hand-in-hand with an increase in global trade.
- Third, diffusion of ICTs. Expansion of trade in the 19th century arose thanks to reduced transport costs. Expansion of trade in the 20th and 21st centuries is fuelled by the reduced transaction costs that ICTs can deliver, making it easier for buyers and sellers to find each other, providing more accurate

¹Western governments have been slower to lower protectionist barriers in some sectors.

information about traded items, enabling previously untraded items to be traded, and increasing the numbers who can trade by reducing entry barriers.

The current orthodoxy about this growth of trade is that it is a 'good thing' for developing countries. Trade is seen as playing an important role in reducing poverty because it boosts economic growth, and the poor tend to benefit from faster economic growth [5]. However, it is also recognised that there are great difficulties for developing countries to both participate in and benefit from expanding international trade. Many people in poor countries will become net losers in the process of global trade liberalisation, particularly over the short term [*ibid*].

For those who believe that adaptation to the new liberalised trade environment is the way forward, not a retreat into protectionism, concern over these difficulties has led to two major development initiatives. One is an attempt to help overcome the barriers to trade in developing countries; an important issue but one that will not be addressed here. The other is an attempt to reduce the costs and increase the benefits of trade for those in the developing world. One strand of this attempt has focused on non-economic negative consequences of trade. These are expressed primarily in terms of the potentially unfair trade practices of multinational companies, and the negative socio-economic and environmental effects of increased trade between the industrialised and the developing world.

These concerns cover a broad spectrum of issues including human rights, labour standards (including child labour and forced labour), conditions of employment and minimum incomes, issues of non-discrimination and gender, and environmental impact (both local and global) throughout the production/consumption lifecycle [13].

It is concern about these 'negative aspects of globalisation' that has given rise to renewed interest in the concept and practice of ethical trade.

2.2. Ethical trade initiatives

Ethical trade can claim a wide-ranging set of historical roots, from the ethical business principles encouraged by most major religions to the 19th century co-operative movement in the UK and labelling schemes in the US. It returned to prominence in the 1980s and (more) the 1990s, as a term used to describe the shared goals and approaches of various NGOs and aid/donor organisations, and encompassing a wide range of disparate purposes around which private, public and campaigning initiatives have coalesced [6]. However, the principal goal of ethical trade was to provide a vehicle for promoting internationally-recognised labour standards and fundamental human rights in developing country workplaces.

In practice, ethical trade has traditionally been focussed on large globalised firms, as seen in those individual companies headquartered in North America and Europe that have adopted voluntary codes of conduct to cover labour conditions in their subsidiaries and sub-contractors in developing countries. This has often occurred within individual sectors, and with a wide variation in codes between firms and sectors [15,25].

These large multinational companies have participated in ethical trading initiatives not only due to humanitarian concern about adverse labour conditions, but also for direct commercial reasons. Ethical codes of conduct have often been embraced by companies in reaction to direct consumer pressure, or in reaction to criticism from organisations campaigning on behalf of consumer or worker groups. Ethical trade has also been used to form the basis of a positive corporate image, and as a means of creating increased stability within the commercial environment of globalised firms, particularly within supply chains [2].

In recent years, the scope of ethical trade has broadened somewhat. For example, environmental issues have started to be incorporated alongside the original socio-economic aims. There have been

attempts, such as the UK's ETI, to consolidate disparate codes, auditing and verification procedures within an agreed common benchmark standard. Fair trade programmes have also started up, although these should arguably be differentiated from ethical trade. Fair trade provides export opportunities and direct assistance for small-scale producers in developing countries, and seeks to ensure that these producers receive fair recompense and sustainable employment.

The continuing focal point, though, for ethical trade activities has been those multinational producers sourcing final or intermediate goods from developing countries.² We can summarise the approaches to these target organisations made by ethical trade advocates in the following way:

- Direct advocacy: as noted above, international NGOs, donors and other ethical trade advocates are exerting pressure on multinationals for improvement of socio-economic standards. This is done through encouraging internal company codes of conduct or greater corporate responsibility or improved methods of social and environmental accounting.
- Indirect advocacy via consumers (creating market pressures on producers): the industrialised country consumers who purchase goods sourced in developing countries have been another target for ethical trade initiatives. Influence on rich consumers has come either through direct campaigning or indirect means such as social and environmental labelling at point of sale. By affecting the purchasing decisions of consumers this will create market pressures on producers. The hope is that these market incentives will cause producers to raise labour, human rights and environmental standards.
- Indirect advocacy via national governments (creating regulatory/advocacy pressures on producers): ethical trade advocates are working with national governments, particularly in developing countries. Their aim is to alter a variety of national policies, including those related to multinationals and foreign investment, as well as those related to the aforementioned labour, human rights and environmental standards. In the current climate of liberalisation, outcomes are more likely to appear in the form of national advisory codes, or governmental advocacy rather than policies of regulation.
- Indirect advocacy via international trade fora (creating regulatory/advocacy pressures on governments and producers): advocates (notably the International Labour Organisation) have sought to push issues of ethical trade into the mainstream of trade negotiations and agreements; seeking, for example, to include social clauses or binding codes of conduct into multi- or bi-lateral trade agreements, with associated sanctions for those who break the codes [22]. However, the use of such mechanisms has come in for much criticism: from neo-liberals who object to what they see as re-regulation, but also from developing countries who see social clauses as having little impact on poverty, and – through their links to sanctions – being used as quasi-protectionist measures by the richer nations [29].

A simplified summary of the stakeholders and pressures involved is presented in Fig. 1. It must be recognised that the reality is more complex. Governments can be both targets for and organisers of ethical trade actions. Producers, too, may self-develop standards on the basis of ethical rather than commercial concerns. The media can play an important intermediary role. In an overall sense, though, this gives us a first sense of key stakeholders and relationships in ethical trade.

²As such, the term 'ethical trade' is something of a misnomer: the focus is more on 'ethical production' than on the nature of trade and trading relations (the latter are addressed by fair trade) [6].

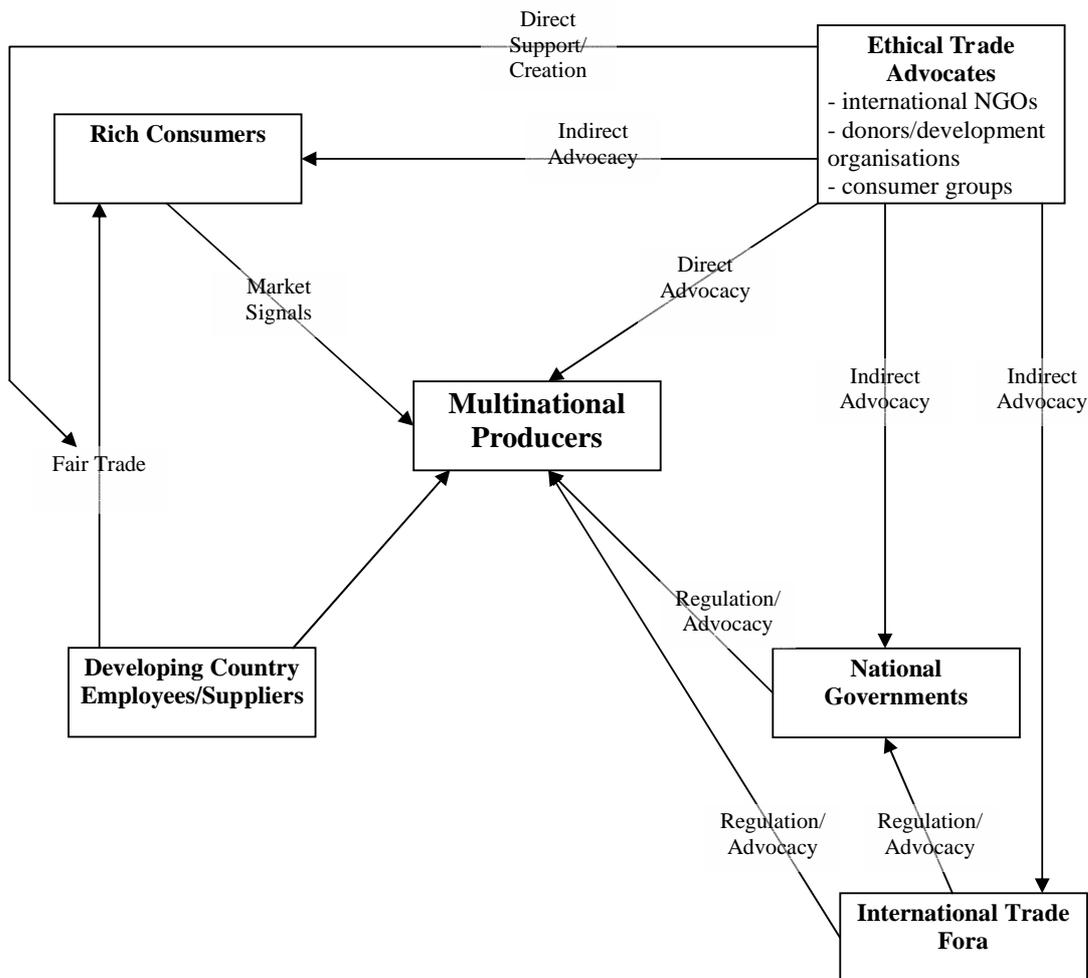


Fig. 1. Overview of stakeholders and activities in ethical trade initiatives.

3. Information systems and ethical trade

3.1. Ethical trade regulatory information systems

The process of advocacy contains a strong informational element; requiring data on the impact of ethical and 'non-ethical' trade or production, sample codes of conduct, opinions of key stakeholders, etc. However, advocacy – such as an attempt to bring in a new code of conduct – is an inaugural activity that predates the main operation of an ethical trade initiative. This, then, will not be our focus. Instead, we will look mainly at the role of information in the ongoing regulatory work of operational ethical trade systems.

Regulation – including the self-regulation that governs much ethical trade – is about monitoring and control. The core information system model will therefore be that of the management information system (MIS), defined as a system that supports the monitoring and control of processes and resources. We can therefore modify a standard MIS model in order to model the systemic workings of ethical trade [16]. The result is shown in Fig. 2.

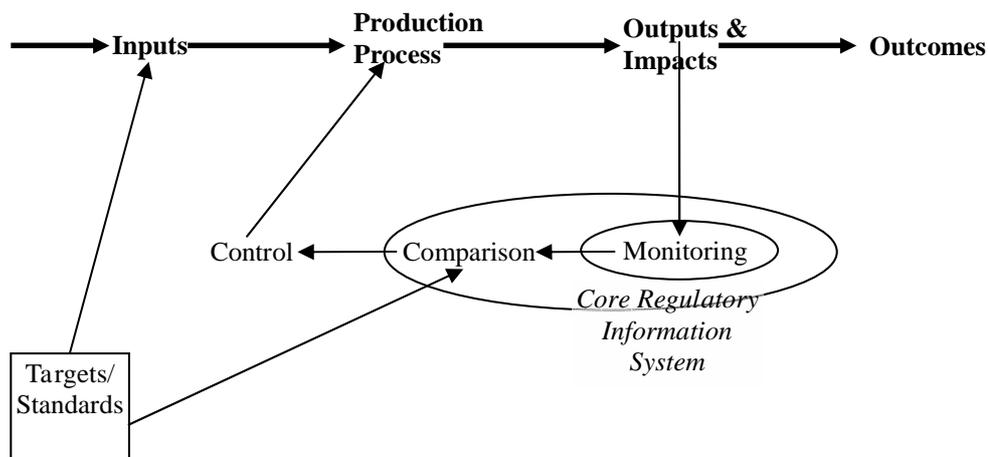


Fig. 2. The core information system of ethical trade.

If it is to function effectively, this ethical trade regulatory system must consist of four main elements:

- *A process.* At the core of the system is the production process that turns inputs into outputs, such as the manufacture of clothing, or computers, or cars.
- *A monitoring mechanism.* This mechanism gathers performance indicator data: in this case, data about impacts from the production process (e.g. on employee health and incomes or on the environment).
- *A comparison mechanism.* This compares the data gathered about current performance with data on previously-set standards, benchmarks, targets, etc (for example, those laid down in codes of conduct). These two types of data represent the main data needs of the ethical trade regulatory system.
- *A control mechanism.* This decides upon and then ensures implementation of corrective action based on the output of the comparison. For example, where a producer finds that underage workers are being employed in a subsidiary factory, they might take action to have those underage workers replaced.

Ethical trade regulatory systems therefore represent a feedback loop in which, typically, information about a later stage is fed back into control of an earlier stage. Where all is well and production is being undertaken according to ethical standards, the system's only function is to monitor and report. Where a problem – a shortfall between the actual and the desired ethical standards – arises, the system's function is to assess the impact and cause of that problem, and to decide on and then implement remedial action.

The place of information systems within the overall regulatory system is indicated in Fig. 2. As shown, ethical trade regulatory information systems (ETRIS) can be of two different types:

- *Monitoring IS:* these merely gather data about production impact and present it to the recipient, who will then do the comparison him/herself.
- *Monitoring and comparison IS:* for these information systems, the pre-set ethical standards for performance have been entered onto the information system. The IS is therefore able to perform the comparisons itself, typically producing an exception report where all is not well.

Having understood the basics of the overall systems and the information systems for the operation of ethical trade, we can now combine the stakeholder/structural picture represented in Fig. 1 with the

process view provided by Fig. 2. This combination is summarised in Fig. 3, and shows that different stakeholders typically perform different informational roles:

- The original producers – the developing country employees, subsidiaries or suppliers – are the main data sources from whom certain types of impact data are sourced.
- The multinational producers – typically involved in the other stages of the value chain (e.g. research, design, sales, marketing, management) – are active in monitoring. They often capture and process impact data, using ethical accounting and auditing techniques in order to quantify and report the social and environmental aspects of corporate operations. They may also (either individually or as sectoral associations) set the targets and standards that inform the process of comparison and, for their own internal or for external reporting processes, may perform the comparison themselves. Additionally, it is the multinationals which mainly engage in the process of control; altering operations in order to increase the achievement of ethical standards. Finally, the multinationals will also be recipients of data from the other key stakeholders – advice or advocacy data from the advocates; and sales and values data from final consumers. This, too, will be fed into the processes of setting standards and of controlling production processes.
- The ethical trade advocates mainly play the role of intermediary between producer and consumer, to some extent substituting or supplementing the role of government in this new form of more ‘market-friendly’ regulation. They may undertake independent monitoring of production; sometimes covertly but most often with the compliance of producer stakeholders. They will often take responsibility for holding producers to account against ethical standards. Since they do not directly control production processes, they attempt to exercise control by influencing producers in the ways described in Fig. 1: through direct advocacy, through governments and international bodies or, most notably, through dissemination of information to consumers.
- Consumers are rarely in a position to directly monitor or compare raw data from production in developing countries. They must rely on summary data disseminated by multinational producers or by advocate intermediaries; data which normally incorporates comparison. Consumers exercise control indirectly through their purchasing decisions; creating data that – as noted above – is captured and used by producers.

The ETRIS therefore acts as a ‘market-plus’ system. At root, it does focus on transactions (consumers buying products) and on data passing between buyer and seller (i.e. between consumer and producer). However, it differs from a normal free market in two ways.

First, the data that flows goes well beyond the normal ‘price’ or ‘price and quality’ factors; it now incorporates data about the conditions and impact of production in one direction, and about the values of consumers in the other direction. Second, this marketplace is populated by intermediaries. The multinationals themselves are intermediaries that intervene between original production and final consumption. More crucially there are the ethical trade advocates (and other intermediaries such as the media) who add value to the data flows through processing and comparison, but who also (see below) add values to the data flows through their assumptions and norms about ethics and development.

3.2. Evaluating ethical trade regulatory information systems

From the foundation of this basic model, we can now lay out some deeper questions that can be asked of ethical trade regulatory information systems. These questions readily derive from informational issues that surround the basic information systems model on which ETRIS are based [16,21].

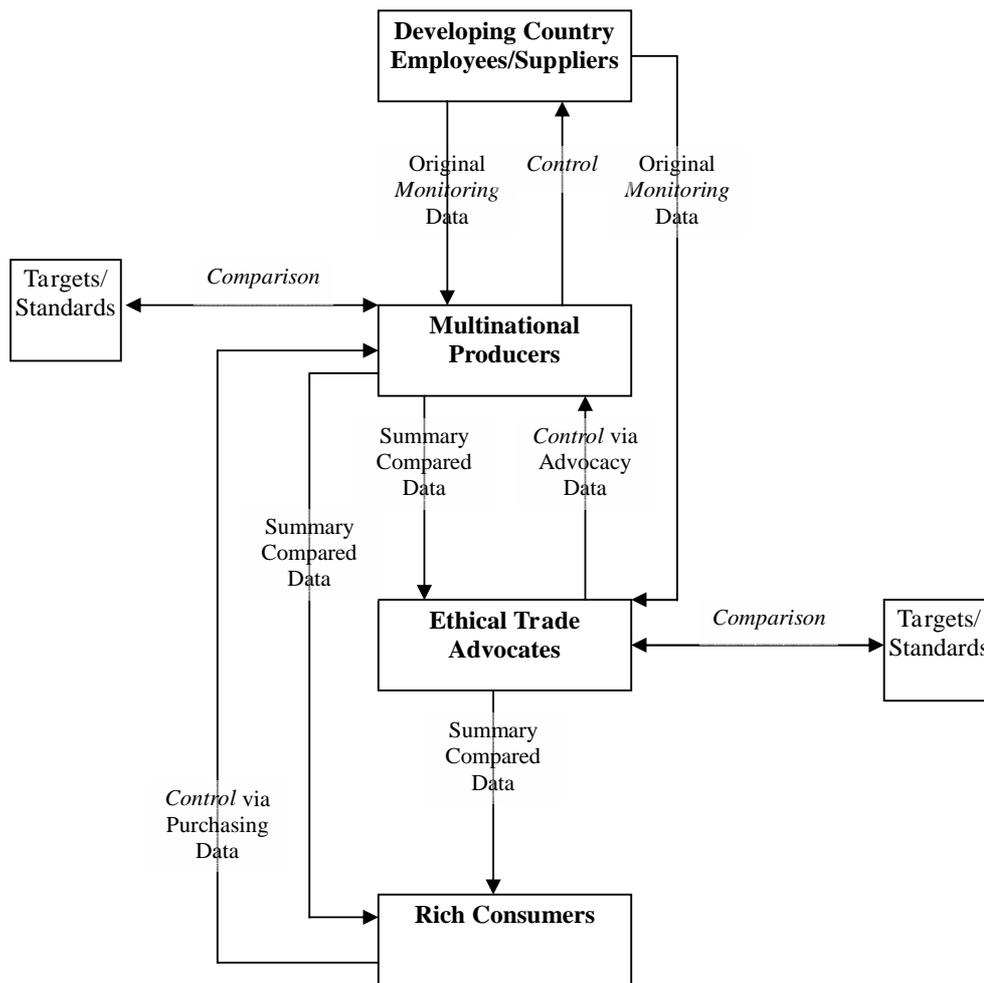


Fig. 3. Data flows and regulatory processes in ethical trade.

3.2.1. Are all system elements in place?

As noted, the regulatory system will only work if it contains: a process; performance indicators that are monitored; a means of comparing performance against standards; and an effective control mechanism. Systems theory can add a further point based on identification of the system as a feedback mechanism: all this must take place within an effective time frame (it is no good a manufacturer improving ethical standards long after its customers have deserted it in disgust) [30]. This set of five items forms a simple checklist to assess the basic functioning of the overall ethical trade regulatory system.

3.2.2. What is monitored: inputs, processes, outputs, impacts or outcomes?

Figure 2 shows impacts as the key data focus for the ETRIS. We defined impacts in terms of impacts on producers. This forms quite a broad scope for data. It can encompass the direct effects of production on economic, social and environmental factors in the host developing country, as mediated through the employees, subsidiaries and suppliers involved in production. Equally, though, it can also encompass sales data and purchasing decisions of consumers as they impact the multinationals involved.

Although impact data is the main currency of ETRIS, other data may be gathered instead or as well:

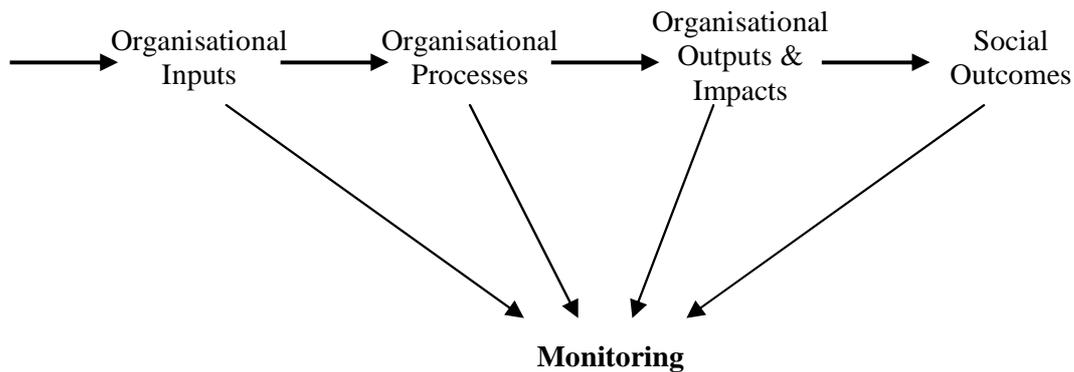


Fig. 4. Different data/performance indicators monitored by ethical trade regulatory information systems.

- *Inputs*: the resources that are used by the organisation, such as its use of child labour.
- *Processes*: the nature of the manufacturing process or supporting processes, such as recognition of trade unions.
- *Outputs*: the direct products produced by the organisation, such as production of arms or tobacco-related products.
- *Outcomes*: the wider impacts of the production process, such as its longer-term environmental sustainability.

We can therefore redraw part of the system model, as in Fig. 4, to show the different possible data that may be monitored.

The ETRIS can monitor one or more of these measures. In the latter case, it will need some mechanism for integrating or at least co-ordinating the different measures.

The nature of the item monitored also affects the legitimacy of the overall information system. There is a general rule of performance indicators that applies equally here: the further left on the Fig. 4 line you monitor, the easier it is to capture the data; the further right on the Fig. 4 line you monitor, the more useful the performance indicator [10]. The temptation – for both multinationals and advocates – will be to capture the data that is easy rather than the data that is useful. This tension will infect all ETRIS, and also serves as a further means for evaluation of those systems.

3.2.3. *Is there comprehension between comparison and control?*

Figure 2 glosses over a task that comes between comparison and control. This is the task of comprehending why there is a difference between actual and target performance. Where some divergence from target is detected by comparison, ideally one would not immediately leap to control it. Instead, you first move to comprehend the cause of the difference. The overall monitoring, evaluation and control process would therefore be represented as shown in Fig. 5.

This issue of comprehension – and its associated information flows – will underpin the long-term developmental value and credibility of ethical trade. Child labour presents an example. Views of this prior to the 1990s were relatively simplistic. Child labour was a ‘bad thing’. Where monitoring showed that it existed, the control meant boycotting offending producers.

Fuller inquiry and explanation – processes of data-gathering, information generation and knowledge-building – took place during the 1990s. These showed the crucial economic role of children in many households, and the potentially damaging effects of boycotts: some children thereby removed from productive work did not move into education as hoped; instead they became unemployed members of

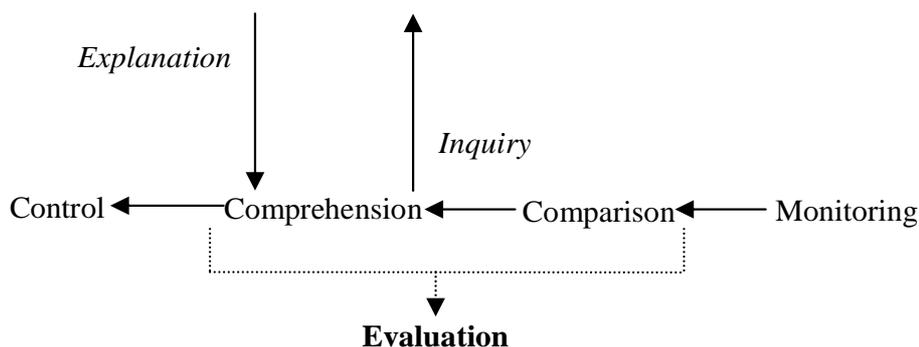


Fig. 5. The full process of ethical trade monitoring and control.

impoverished households [3]. As a result, the issue has come to be treated with a great deal more sensitivity, using support, encouragement and voluntary codes rather than sanctions.

This has only been possible because of the effective information systems that support inquiry and explanation. ETRIS assessed as lacking such additional IS components may therefore be ineffective, enabling knee-jerk reactions (e.g. from busy Western consumers) rather than allowing understanding of the bigger picture behind developing country production issues.

3.2.4. What qualities does the ethical data have?

Data is the foundation of any information system, including any ETRIS. But what qualities does that data exhibit?

At root, ethical trade data should be judged by rational criteria such as CARTA; judging how complete, accurate, relevant, timely and appropriately presented the data is. Judging ethical trade data in these terms is a vital first step in the evaluation of ETRIS. It is also an area of concern because of the identity of those who capture the data.

In many cases, data is captured by the producers themselves. They may clearly experience strong tensions at times between the need for 'CARTA' data, and the corporate need to be seen to be achieving ethical targets. Indeed, multinationals are accused of data misdeeds from filtering to distortion to lying in their efforts to appear more ethical than they actually are [20].

Independent inspection should remove the tension between truth and profit. However, even here one must always be aware that institutional cultures, worldviews and objectives will impact the process of data capture, processing and transmission. Data is never neutral: it always reflects the contexts in which it is handled, and the values of those who handle it [11].

Hence, we must be aware that, alongside the rational values of data are a set of more interpretive values that affect the functioning of ethical trade regulatory information systems. Examples include:

- the perceived trustworthiness and authority of the data source,
- the data capturer's valuation of what is and is not worth capturing,
- the extent to which data chimes with the existing values of the recipient,
- the novelty of the data,
- the medium by which it is transmitted, and
- the context within which it is received.

Both multinationals and ethical trade advocates (including the media) are well aware of these interpretive values. Multinationals particularly have made great use of them in their bid to gain consumer

attention, and to influence consumer behaviour. A classic example from the 1990s were the car manufacturer campaigns that left some consumers with the impression that cars running on unleaded petrol were somehow good for the environment.

In part, this highlights another data issue: the problem of data filtration and summarisation. At the point of capture, there may be a rich array of data on the socio-economic conditions of production, and on the socio-economic and environmental impacts of production. However, this rich array, plus accompanying standards for comparison, cannot be fitted onto the side of a coffee jar. It must be significantly filtered and summarised before presentation to consumers; the extreme of this being the single brand 'eco-label'. Whilst eco-labelling has been successful in changing consumer behaviour, it has also been criticised for its massive over-simplification; i.e. for data filtration and summarisation that ranges from over-zealous to plain misleading [9].

4. ICTs and ethical trade

The previous section has explored the various ways in which information supports the self-regulatory process of ethical trade. Given the centrality of information to ethical trade, we now move on to investigate the potential role of information and communication technologies. The word 'potential' must be noted – there are no studies about ICTs in ethical trade. All we can achieve here, therefore, is to lay out some key issues.

A glance at Figs 1 to 3 indicates that ethical trade involves plenty of data processing and even more data communication; including communication between globally-dispersed stakeholders. ICTs will thus be readily applicable within ethical trade and – as noted in the Introduction – the technology is already in use in a number of ways: putting unions in developing countries in touch with advocates; supplying ethical trade data to consumers through advocate and producer Web sites; and enabling discussions between stakeholders [14].

ICTs will bring their traditional advantages to ethical trade [1]. They will increase the speed and precision of data processing, enabling ethical trade information to be compiled more quickly and more accurately. They will increase the speed and scope of data communication, enabling ethical trade information to reach more stakeholders in a more timely manner. This, in itself, will help to address some of the issues identified earlier about accuracy of data, and timeliness of the ethical trade feedback loop.

Ethical trade portals already exist (e.g. www.ethicalconsumer.org and www.infact.org), on which a wide variety of data about producers, products, production and impacts is held. With the spread of mobile computing, it is not too fanciful to imagine situations in which consumers can swipe a bar code in the supermarket to receive a rich range of data; thus overcoming the filtration and summarisation problems identified above.

It is even conceivable, using current technology, that disintermediated exchange of data can take place in real time between original producer and final consumer; allowing a potential customer to directly observe production, or receive oral testimony from production workers. However, electronic support for reintermediated models seems a more likely route to be followed, particularly given the significant data capture and processing loads imposed by ethical trade monitoring and comparison processes.

Signs of this reintermediation are already seen in fair trade, with the reintermediating activities of fair trade portals (e.g. www.fairtradeonline.com and www.onevillage.org). In these cases, the portal host undertakes significant data capture and processing on behalf of both producer and consumer. Consumers are presented with summarised data on the conditions and impacts of production; producers are presented

with summarised data about the needs and wants of Western consumers. Normally, neither group could easily access the other's data because of high cost and other barriers; hence the value of ICT-enabled intermediation.

Alongside these benefits that ICTs may bring to ethical trade, though, their growing use raises a number of more challenging issues.

Where ICTs are used, we must recognise the now familiar issue of the digital divide: of the impact on those stakeholders who lack access to the new technology. ICTs should ideally be used as a supplement to non-digital means of handling data, but the tendency is that ICT-based systems supplant other systems, for cost and other reasons [17]. Poor consumers – already challenged by any ethical price premium³ – may face greater difficulties in making ethical consumption decisions. Poor producers – already marginalised to the role of just data sources in many ethical trade systems (see Fig. 3) – may find themselves marginalised still further and entering into relationships of even greater inequality with multinationals.

As noted above, ICTs can improve the accuracy of data processing. However, they do little to impact the accuracy of the data originally captured. Yet data handled by ICTs – even if inaccurate – may be given spurious credibility because of the perceived objectivity of computers thanks to their 'aura of precision and futuristic sophistication' [23, p. 231]. There is also a risk, given the strong motivations and values of those involved in ETRIS, of ICTs masking the inherent subjectivities that attach to and strongly affect ethical trade data.

Finally, drawing on earlier points, we should remember other things that ICTs will not affect [18]. They will not affect the other resources that are required to turn data into decisions and actions. For example, ICTs can help to deliver data on the ethics of production to a consumer. But they do not deliver the motivation to make use of that data. They do not deliver the knowledge required to understand and interpret that data. They do not deliver the power to exercise significant control over the production process.

In sum, ICTs have a beneficial role to play in ethical trade regulatory systems, but a role that is both limited and challenged.

5. Conclusions

The growth in global trade has been paralleled by a growth in concerns about the impact of global trade on workers and suppliers and environments in developing countries. One response to such concerns has been the instigation of ethical trade initiatives.

Ethical trade has a moral simplicity that leads one to assume it will be developmentally positive. The actual results are a little less clear. Voluntary codes of conduct in the clothing industry, for instance, have been effective in significantly reducing the incidence of child labour [24]. But, as noted above, this can have both positive and negative impacts on poor communities. Likewise, ethical standards increase the costs of production. Where these costs are willingly absorbed by consumers as an ethical premium, they can have a relatively straightforward and positive developmental impact. However, if the costs have to be absorbed by the developing country producers, this may lead to unforeseen and unwanted outcomes, such as greater mechanisation of production and consequent loss of employment opportunities.

³The additional price that many richer consumers have been found willing to pay when purchasing goods that have been given the stamp of ethical approval.

Whatever the impact of ethical trade, ethical trade initiatives are on the increase. Ethical trade has largely arisen due to the success of advocate interest groups (such as consumer groups and international NGOs) in exerting pressure on producers, both to acknowledge the existence of ethical considerations and to take action to improve conditions.

As described above, this process has been significantly information-driven. Increased information has created increased awareness about adverse employment conditions, infringements of human rights and environmental degradation. Accordingly, this information has stimulated producers and consumers to question their activities and their preferences, and to voluntarily adopt new standards of behaviour or, for consumers, change their patterns of consumption.

The information system is thus the heart of the ethical trade regulatory system. Most ethical trade initiatives have foremostly been information campaigns (something for which they are sometimes criticised). Hence, an informational perspective is crucial to understanding ethical trade.

From this perspective, we can model the core 'ethical trade regulatory information system'. This, in turn, can be used to better understand the way in which ethical trade operates, to evaluate ethical trade initiatives, and to identify key information- and ICT-related issues.

Data quality is one key issue. The accuracy and other rational characteristics of data may be undermined by the strong and differing worldviews that inhabit ethical trade initiatives. These may also serve to emphasise more interpretive characteristics of data; characteristics that remain rarely discussed in traditional/hard variants of IS analysis and design [4]. ICTs have little to offer here. Indeed, in a variant on an old phrase, they run the risk of converting ETRIS into GIGO systems: 'Garbage In, Gospel Out'.⁴

The whole gamut of IS resources also needs to be recognised. Not just the data requirements, but also the socio-economic package that enables full engagement in ethical trade: knowledge, money, skills, motivation, power. Again, ICTs and hard approaches to IS analysis and design have little to offer here. This suggests that soft systems methods – with their holistic approach and consideration of different worldviews – will be particularly appropriate in the design of ETRIS. It also suggests that both conceptual frameworks and practical tools for ETRIS need to be able to cope in an integrated manner with digital and non-digital, formal and informal means of handling data.

Beyond this, we can say little at present. The need now is for more research, particularly field research including case studies. This will help us understand more deeply the actual and potential role of information and of ICTs in support of ethical trade.

5.1. Implications for self-regulation

Ethical trade is of interest per se, because of its growing impact on global trade and because of its potential impact on some central development goals. As noted in the introduction, though, it is also of interest because it epitomises a new form of relationship between consumers, producers, and others: self-regulation.

Self-regulation, as the name implies, is a form of regulation imposed upon themselves by stakeholders in the production-consumption chain [28]. It exists outwith the framework of formal regulation, such as binding bi-/multi-lateral trade agreements or binding national laws. It seeks to create a basic framework of values, behaviours and rules that reflect both consumer and producer interests, encompassing the interests of all production stakeholders, including employees and their families. It arises as a compromise between,

⁴Acknowledgements to Norah Stoops for pointing this out.

and as an alternative to, international/state regulation on the one hand and the open competitive reign of the free market on the other.

Self-regulation is seen as particularly appropriate to the present-day political and economic context. This is a context in which states and international bodies cannot or will not regulate the market relationship between consumers and producers, due to WTO or similar constraints, or due to fear of damaging national competitiveness. Yet it is also a context in which serious shortcomings are seen, particularly for the poor and excluded, in the functionings of the free market.

Other features of self-regulatory systems, which particularly distinguish them from the more traditional forms of state regulation, include [7]:

- Such systems are decentralised and participatory rather than centralised and authoritarian. Ownership of rules and regulations is not confined to a single regulatory body, but tends to be dispersed among market actors and non-governmental stakeholders.
- Rules are designed through participation and consensus of stakeholders, largely bypassing the traditional political process. Self-regulation thus constitutes a disintermediated form of regulation (i.e. although government may act as facilitator or even stakeholder, it no longer retains control of the rule-making process)
- Non-governmental stakeholders have a direct influence on rulemaking, implementation and compliance procedures (representing a reintermediating tendency).
- Adherence to rules and regulations is obtained exclusively through voluntary compliance and is based largely on trust between market actors.

Ethical trade, with its voluntary codes, is a strong example of self-regulation that comfortably fits the characteristics of self-regulation outlined above. It is an apparent informal and voluntary alliance between two main groups. On the one hand, consumers who are voluntarily incorporating values into their individual purchasing decisions (with surveys suggesting most consumers do not want to consume products that derive from unethical practices). On the other hand, producers who (for both economic and non-economic reasons) wish to conform to common standards that are not a threat to fair competition, and are thus voluntarily incorporating ethical criteria into their business decision making [27].

Understanding the informational characteristics of ethical trade may thus also offer us broader insights into the informational characteristics of self-regulation. This is valuable given that self-regulation is covering important current issues such as corporate accounting standards, organic food production, and governance of the Internet. Informational issues include all those identified earlier:

- the centrality of information;
- the importance of data quality;
- the tensions between interpretive characteristics of data (symbolism, sense-making, authority, etc.) and rational characteristics of data (completeness, accuracy, etc.);
- the need for a holistic view of the resources required to turn data into decisions and actions.

A number of these issues apply equally to systems of traditional state regulation, but self-regulation does add its own informational characteristics. These particularly relate to the large number of stakeholders, the participative nature of decision-making and, hence, the importance of trust and other data items related as much to perceptions as to reality. As with ethical trade more specifically, these characteristics all point to the value of selecting soft systems approaches in the exploration and design of self-regulatory information systems [8].

Finally, while this introductory paper has been able to lay out some of the fundamental ways in which information underpins this new and growing trend, it cannot yet offer a detailed analysis of the

relationship between information systems and self-regulation. Hence, the call for further research applies equally to self-regulation.

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