A REVIEW OF RWANDA'S
TEXTILE CLOTHING SUBSECTOR

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ABSTRACT

This paper examines the structure and evolution of Rwanda's textile clothing subsector. Compared with other African countries, Rwanda's clothing supply system includes an unusually high concentration of used clothing imports along with abnormally low tailoring employment. Because fears of displacement in domestic textile industries have led the governments of Kenya and Nigeria to ban used clothing imports, discussion pays special attention to the potential employment, income and income distribution tradeoffs accompanying the introduction of used clothing.

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PREFACE

This paper reviews the size, structure and economic performance of Rwanda's textile clothing subsector. It pays particular attention to the effect of government policy on the subsector. Commissioned by Rwanda's Ministry of Finance and Economy, this review is the first in a series of Industrial Incentives Studies financed under the USAID-financed Policy Reform Initiative for Manufacturing and Employment (PRIME). As with other studies in the series, this one aims to evaluate the economic performance of a key segment - a key subsector - of the Rwandan economy, emphasizing the effect of current policy on efficiency, employment and equity within each.

Numerous individuals contributed substantially to the present textile study, making possible a much richer anaysis than would have normally been possible during a one month study. In particular, Mr. Jean Marie Vianney Mbaguta, Director General of Economic Policy in the Ministry of Finance and Economy (MINFINECO) and Director of the Industrial Incentives Study, provided encouragement, logistic support and greatly facilitated access to knowledgeable individuals in government and the private sector. Dominique Seruhingo of MINFINCO provided expert assistance with the fieldwork, helping to interview a wide range of textile subsector participants. Professor Donald Mead, Technical Advisor for the Investment Incentives Study (IIS), closely supervised the field work and in so doing provided invaluable analytical, logistic and moral support throughout the course of the study. The four Rwandan experts associated with PRIME - Gratien Gasana of the Customs Department, Francois Regis Harelimana and Athanase Karakezi of MINFINECO, and Charles Nyamwigendaho of the Ministry of Industry and Artisanat (MINIMART) - offered valuable input during the study as well as the benefit of their observations on a preliminary reporting of the study findings. Nguyen Hun Khiem of the IIS staff and Michelene Mescher of USAID both furnished particularly valuable analytical and logistic support. Nicholas Minot, Research Analyst with the National Household Budget Consumption Study, labored long evening and weekend hours to produce the extremely important clothing expenditure profile by expenditure class. In addition, the following people provided key help at various junctures during the course of the study: Ed Robbins, Gustave Nkurunziza, Tharcisse Kubwimana, Judy Derrier and Bruce Lerner of USAID/Rwanda; Gerard Nyatigeka, Jean Bakundukize, Jean Bosco Gahigi and Felicien Kanyamibwa of the Rwandan National Bank(BNR); Mediatrice Niwenamuha and Theodore Nahabo of the Chamber of Commerce; Jim Herne and Fiacre Murekezi of Technoserve; Jurgen Schroeder and Speciose Uwiherekeje of MINIMART.

While countless private businessmen and women also furnished valuable accounts of the workings of the textile subsector, confidentiality requires that they remain anonymous. Their cooperation was nevertheless essential to the conduct of the study. Their assistance and insights are gratefully acknowledged.

I. ISSUES AND MOTIVATIONS

This study examines Rwanda's textile clothing subsector. It includes, within textile clothing, all new and used garments made of cloth or yarn but excludes non-textile apparel such as shoes, belts, watches and other non-fabric clothing accessories. As with subsector analyses in general, this one examines not only clothing manufacture but also the distribution and retailing of finished garments. And, to the extent it exists in Rwanda, the the subsector also includes production and distribution of key inputs used in the production process. So Rwanda's textile clothing subsector encompasses the entire domestic production/distribution system through which fibers, yarn and cloth flow as they are transformed and ultimately distributed to consumers in the form of finished clothing.

Textile clothing commands the attention of Rwanda's policy makers for a number of reasons. First, the market is large and growing. Currently textile clothing constitutes the country's third biggest consumer market, garnering about 11% of total consumer expenditure and about 20% of all non-food spending. Only food and lodging attract greater consumer spending.

Second, because imports supply large segments of the clothing market, textiles require substantial amounts of periodically scarce foreign exchange. In fact, from the mid 1960's to the mid 1970's, imports of textile clothing exceeded the value of any other imported commodity. While clothing, used clothing and cloth imports have grown rapidly since the mid-1970's, their share in Rwanda's total import bill has declined to about

10%, placing textiles behind transport equipment, petroleum products, machinery and sometimes food and construction materials (see Table A.3). Thus, textile clothing remains an important impot t commodity, although no longer the country's largest.

Third, employment in Rwanda's textile clothing subsector appears to lie substantially below the levels found in other African countries. Tailoring is Rwanda's second largest manufacturing employer, accounting for about 27% of manufacturing jobs nationwide (see Table A-7). Yet since manufacturing in general is so thinly developed in Rwanda, textiles account for only about 3% of non-farm employment, far less than in many other African countries. In the African countries for which evidence is available, employment in garment manufacture stands at two to ten times the density found in Rwanda.[1] Moreover, Rwanda imports a far greater share of used clothing than do most other African countries. On a per capita basir, Rwanda imports double the Africa-wide average for used clothing and four times as much as neighboring Zaire.[2]

Could there be a causal link between Rwanda's high used clothing imports and its low employment in textile industries? Some governments think so. The Kenyan government, for example, banned imports of used clothing because they feared labor displacement in their local textile

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[1] According to Rwanda's 1978 census, clothing manufacture employs .9 persons for every 1,000 members of the country's population. But that figure rises to 2.1 in Nigeria, 4.8 in Egypt, 6.5 in Zambia and 9.2 in Sierra Leone (calculated from Aluko et al., 1972; Davies et al., 1984; Milimo and Fisseha, 1985; and Liedholm and Chuta, 1976.)

[2] Computed from United Nations (1983) and World Bank (1985).

industry. Because the potential for labor displacement could be substantial in a large market such as textiles, this concern has further fueled policy interest in Rwanda's textile market.

Finally, the recent establishment of cloth dyeing and printing facilities in Rwanda has led to close public and private scrutiny of the domestic textile industry. The newly established firm, UTEXRWA, has requested protection, thus challenging the interests of cloth importers and requiring that government carefully evaluate alternative policy interventions.

This paper hopes to contribute to an informed evaluation of policy alternatives in several ways: a) by identifying the principal channels serving consumer clothing needs; b) measuring the size of each channel as well as its relative contribution to employment and value added; c) examining the economic efficiency and employment-generating power of alternative channels; d) identifying major changes under way; and e) exploring the impact of present policy on relative efficiency and competitiveness of alternative channels. Ultimately, the paper aims to evaluate prospects for improving subsector performance through policy intervention.

II. OVERVIEW OF RWANDA'S TEXTILE CLOTHING SUBSECTOR

A. A Profile of Textile Consumption

Rwandan households direct 11% of total spending towards textile clothing, making it their third largest consumer expenditure and the

nation's second largest non-food expense. As Table 1 indicates, only housing expenditure surpasses textile clothing among non-food consumer items.[3]

Within textile clothing, consumers spend nearly half their budget on printed cloth. High income rural consumers and most urban dwellers prefer to purchase cloth and then have it sewn into shirts, pants or dresses at local tailor shops. But many, particularly in rural areas, purchase cloth to wear as wraps which require very little tailoring. Perhaps for this reason, used clothing rather than tailoring garners the second largest portion of the consumer clothing budget. Consumers allocate slightly over 25% of all clothing expenditure for the purchase of used clothing, imported in large bales from the United States and Europe, refurbished where necessary and distributed for sale in public market places around Rwanda. Tailoring accounts for slightly less than 20% of textile clothing expenditure, while imported ready-made clothes account for under 10% of household clothing expenditures. In addition to the household purchases

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[3] The estimates in Table 1 have been derived by marrying together rural expenditure data from the 1982/83 National Budget Consumption Study (ENBC) with a National Bank (BNR) expenditure survey of wage earners in Kigali. But the BNR's exclusion of all self-employed families as well as wage earners with income below 5,000 francs per month complicates the estimation of national totals. Consequently, total national expenditures were computed using three alternative sets of assumptions to extrapolate the BNR figures to all urban areas. Since the composition of textile clothing expenditures did not vary significantly under the three very different sets of assumptions, one can be reasonably confident that estimated totals provide correct rankings and orders of magnitude. When the ENBC urban component is analyzed, in probably a year or so, we will have a more accurate profile not only of textile expenditures but also of national household consumption in all product categories. In the mean time, the projections in Table 1 represent good first approximations.

TABLE 1

ESTIMATED BREAKDOWN OF TOTAL NATIONAL HOUSEHOLD
EXPENDITURE, RWANDA 1983

	Estimated Total National Expenditure			Rural Household Expenditure on Textile Clothing (percent)	Urban Wage Earner Expenditure on Textile Clothing (percent)
	Millions of Francs	Percent of Total	Percent of Textile Clothing		
1. Food and Drink	15.6	44.5			
2. Housing	5.8	16.7			
3. Textile Clothing					
a. Cloth	1.7	5.0	46	51	32
b. Used Clothing	1.0	2.9	27	33	12
c. Tailoring Services	.7	1.9	18	5	)
d. Ready-Made Clothes	.3	1.0	9	12	) 56
Total	3.3	10.3	100	100	100
4. Other Clothing	.6	1.8			
5. Transport	2.6	7.4			
6. Household Effects	2.3	6.5			
7. Others	4.3	12.3			
Total	35.0	100.0			

SOURCE: Rural household expenditure from Appendix Table A-1; urban wage earner expenditure from Appendix Table A-2; Total national expenditure estimated from Tables A-1 and A-2 using rural and urban population weights and assuming expenditures of nonwage urban households to be a weighted average of rural expenditure (two-thirds) and urban wage earner expenditure (one-third).

described in Table 1, institutions such as the military, police, hospitals, and large private employers frequently order uniforms and work clothes for their staffs. Although reportedly growing, this institutional clothing expenditure currently constitutes by far the smallest portion of the textile clothing market, only about 1%.

Comparing rural spending patterns with those in urban areas, two significant differences emerge from Table 1. First, used clothing purchases represent a far larger share of consumer spending in rural than in urban areas. While rural consumers spend one-third of their textile clothing budget on used clothes, this figure drops to 12% among urban wage earners. Second, it appears that urban consumers spend far more on new ready-made clothes and on tailoring services than do rural dwellers. In part this stems from rural preferences for simple cloth wraps, while urban consumers more frequently request tailor-made shirts, pants and dresses.

These variations in clothing preferences, of course, have strong implications for future demand patterns. But before delving into subsector dynamics, it is necessary to review the structure of the production/distribution system which currently supplies the large and growing textile clothing market.

B. Structure of the Production/Distribution System

Resources flow through one of four distinct channels as they are transformed and distributed to Rwanda's consumers in the form of finished clothes. The four principal channels supplying Rwanda's clothing needs are described schematically in the subsector map displayed in Figure 1. It

FIGURE 1

RWANDA'S TEXTILE CLOTHING SUBSECTOR:

BASIC SUBSECTOR MAP
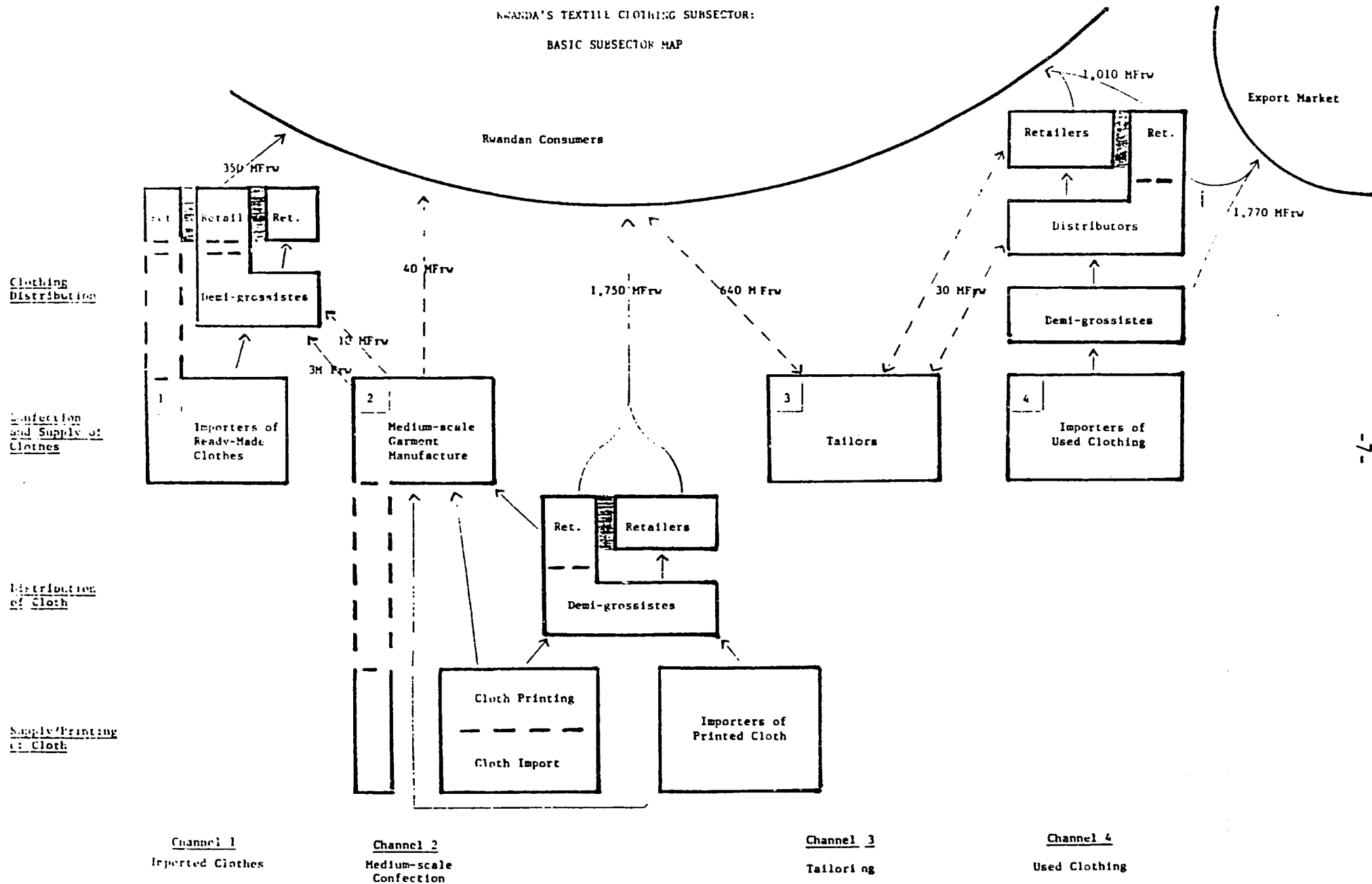
follows standard conventions: a) displaying each stage in the production and distribution process as a separate vertical step, or function; b) using enterprise shapes to illustrate varying degrees of vertical integration; and c) employing dotted and solid arrows to indicate whether goods are exchanged in spot markets or sold on contract.[4]

Channel 1 is the least complex of the four channels supplying textile clothing to Rwanda's consumers. Enterprises operating in this channel import ready-made clothing from abroad. They distribute the clothing to consumers through established retail shops, sometimes passing directly to integrated demi-grossiste/retailers, sometimes through demi-grossistes to independent retailers.[5] In still other cases, clothing importers are fully integrated, retailing garmets they import through their own retail outlets. The second smallest of Rwanda's textile clothing channels, Channel 1 attracted about 350 million Rwandan francs (Frw) of consumer spending in 1983.[6]

In Channel 2, a group of about five medium-scale clothing manufacturers mass-produce clothing, most frequently uniforms and work clothes for

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[4] For further details on subsector analysis, see Boomgard, et.al. (1986).

[5] Demigrossiste is a legal category of trade created by the government of Rwanda as an intermediary between importers and wholesalers on one side and retailers on the other. The government aimed, by creating this extra layer of trading establishment, to facilitate the involvement of Rwandans in what was largely a foreign-controlled commercial sector. Distributor is probably the closest English translation for demi-grossiste, but to avoid potential confusion with Channel 4, this report maintains the legally correct term "demi-grossiste."

[6] In 1983, Rwanda's exchange rate stood at 94.34 francs per U.S. dollar.

institutional purchasers. Firms in this category employ between 10 and 100 workers each, and together they sold about 53 million francs of clothing in 1983. Although dwarfed by all other channels, Channel 2 is widely perceived as being highly profitable, because mass production of individual clothing items allows economical bulk purchasing of cloth as well as assembly line production techniques. Like the tailors operating in Channel 3, the medium-scale clothing manufacturers sell the bulk of their output only on order. But some of the larger firms in the group have experimented with batch production of particular items, shirts for example, which they subsequently distribute through established retail channels. In doing so, they compete head-to-head with Channel 1's imported, ready-made clothing.

Channel 3, by far the largest in Rwanda's textile clothing subsector, distributes printed cloth to consumers who subsequently contract with individual tailors for the confection of finished clothes. In 1983, consumers spent 2,350 million francs in this way. Customers purchased 1,750 million francs worth of cloth and subsequently contracted with tailors for 640 million francs of tailoring services. In all but a few exceptional cases, customers purchased their own cloth which they then delivered to tailors for transiormation, thereby relieving the tailors of the working capital burden incumbent in procuring the cloth.

Technology in Channel 3 is simple and small-scale. Most tailors work alone or employ one or two people. They use simple push-pedal sewing machines, and although most own their own equipment, as many as 25-40% rent the machines they use. Roughly 11,000 tailoring enterprises operate in

Channel 3. Some operate from shops; but many, especially in rural areas, work outdoors on porches or alongside public markets.

Both Channels 2 and 3 transform cloth procured from the same ultimate suppliers. Until late 1985, all cloth was imported. But in September of that year, a new textile plant, UTEXRWA, began dying and printing imported raw cloth. In 1986, UTEXRWA expects to supply about 60% of total cloth consumed in Rwanda.

Several features of its structure and operation distinguish Channel 2 from Channel 3. First is scale. Channel 2 firms employ 10 to 100 workers, while over 90% of the Channel 3 tailors employ less than two. Related to the size difference is a difference in technology. In contrast with the Channel 3 tailors' push pedal sewing machines, the medium-scale Channel 2 firms use electric sewing equipment - often heavy duty industrial machines - along with specialized button-holers and electric scissors capable of cutting dozens of pattern pieces simultaneously. A third distinction lies in the financial structure of Channel 2 and Channel 3 clothing manufacturers. Channel 2 medium-scale firms have access to sufficient working capital that they are able to purchase cloth directly, in bulk from suppliers, while tailor shops almost inevitably contract out only their services to customers who have already purchased their own cloth. Finally, the markets served by Channels 2 and 3 are, to some extent, distinct. Only the medium-scale Channel 2 manufacturers are able to supply the garment quantities required by large institutional contractors such as the military, hospitals and hotels. But in the case of school uniforms and

work clothes, both major market segments, small Channel 3 tailors compete directly with medium-scale Channel 2 firms.

While Channels 2 and 3 are distinguished by their scale of production, capital intensity, financing of raw materials, and institutional as opposed to household markets, the delineation between the two channels is not absolute. Up to a dozen large tailor shops cross back and forth between channels, normally producing on order for individual customers but periodically negotiating a large contract with a bank, hotel, large retailer or some other institution. Most large tailors, in fact, indicate they would like to shift to Channel 2 because of the perceived higher profits available from bulk purchase of raw materials as well as potential efficiencies of assembly-line production. A few rural tailors even produce school uniforms in bulk at considerable cost savings because of bulk cloth purchase. They then retail the uniforms in public markets. In view of the perceived profitability, there may well be more movement into Channel 2 in the future.

Channel 4's used clothing refurbishing and distribution network enjoys the second largest share of Rwanda's consumer clothing expenditure. Supply to Channel 4 distributors begins with international wholesalers, based in Europe and the United States, who purchase used clothing in bulk from church groups, charitable organizations and thrift shops. The wholesalers sort the clothing according to article and fabric then bundle like items in bales ready for export. Individual bales, for example, may be composed of short-sleeved cotton shirts, or long-sleeved synthetic shirts, or shorts,

or cotton dresses, or blue jeans.

Importers in Rwanda order used clothing in 45 to 55 kilogram bales, requesting the garments and fabric they believe will sell most readily given the time of year.[7] They then sell the bales unopened to demi-grossistes. The demi-grossistes operate substantial businesses, commonly holding inventories on the order of 300 to 500 bales at any one time. They, in turn, sell their bales, still unbroken, to distributors.

Distributors normally buy one to five bales at a time, immediately transporting the bales, by wheelbarrow or truck, to the public markets where the used clothing is retailed.[8] They break open the bales in one section of the market and then referee a wild melee in which prospective retailers swarm over the merchandise to select the prime articles for resale. Requiring considerable time and vigilance, the sorting involves substantial haggling between distributors and retailers. Distributors normally retail any leftover items that retailers have not purchased by the end of the morning.

In large markets, retailers frequently specialize in one type of clothing - shirts, pants or dresses. Before retailing their used clothing, retailers contract with market tailors to effect any necessary repair work

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[7] One large importer brings in 600 kilogram bales, which he then breaks down into 45 kg bales for sale to demi-grossistes.

[8] Rwanda's commercial legislation designates used clothing sales as "commerce ambulant," in other words, goods to be retailed through public markets. Only in the rare cases where used clothing is virtually indistinguishable from new are the used clothes sometimes packaged and passed off by retailers as imported ready-made clothes.

or fashion-induced alterations. The retailers then clean and iron their new stock or hire others to perform these services. When their merchandise is presentable, the retailers display their stock and wait for customers. Retailing demands assiduous attention because of the potential for theft and because of customers' propensity to sift carefully through merchandise at many establishments before committing to a purchase.

Retail facilities, supplied by the commune[9] which runs each market, vary greatly across communes and according to market size. The largest markets supply cement booths shaded by corrugated metal roofs. Middle-sized markets may only offer raised wooden platforms on which clothing can be displayed up off the ground. And in the smallest markets, retailers display their used clothing stock on the ground on top of the heavy canvas bale covers. Approximately 6,000 enterprises distribute and retail used clothing in Rwanda's public markets.

As Figure 1 indicates, a substantial proportion of Rwanda's used clothing is re-exported, almost always fraudulently, to Zaïre, Uganda, Burundi and Tanzania. Many of the traders interviewed speculated that as much as half of Rwanda's used clothing imports might ultimately be sold outside the country. By comparing 1983 national consumption data with import statistics for that year, and abstracting from stock changes, it has been possible to estimate roughly how much actually was re-exported. The results indicate that in 1983 well over half, and perhaps as much as two-thirds, of all used clothing imports were re-exported to neighboring

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[9]The commune is a local government authority.

countries. Some of this clandestine export arises because of import restrictions and supply shortages in neighboring countries. In the case of Uganda, demi-grossistes and importers indicate that clandestine exports are a question of war and peace. Fighting in Uganda disrupts both the domestic textile industry and distribution networks inducing extra demand for used clothing from Rwanda - since it is unavailable from Kenya. Peace brings with it a perceptible decline in Rwanda used clothing exports to Uganda. The large re-export trade poses some complications for Rwanda's policy makers, as will be evident in the policy discussions that ensue.

C. Dynamics

1. Major Trends

Available evidence indicates that all segments of the textile clothing subsector have grown over the past 15 to 20 years, although some channels have expanded more rapidly than others. Since all principal clothing inputs and final outputs are imported into Rwanda, the trade figures in Table 2 provide a good starting point for a review of relative growth rates. They show that, in value terms, total textile clothing imports have expanded at a rate of 13% per year since the 1960's.

The value of Channel 4's used clothing imports have grown in tandem with other textiles, increasing at 13% per year over the past 20 years. But quantities of used clothing imports have leaped most rapidly of all, growing at 7% per year compared to 4% for cloth and 1% for new clothes. Of course, because Rwanda re-exports at least half of its used clothing, much of this growth must be attributed to increasing sales in neighboring countries. As proof of the importance of external markets, consider the

TABLE 2

— TRENDS IN TEXTILE CLOTHING IMPORTS

I. Value (millions of francs)

	1965	1970	1975	1980	1985	Growth Rate*
1. Cloth						
a. cotton	51	150	161	590	730	
b. discontinuous synthetics	) 46	) 226	) 397	724	488	
c. continuous synthetics	)	)	)	129	82	
d. others	35	)	)	24	78	
Total	132	376	558	1,467	1,378	14%
2. Used Clothing	---	180	518	685	979	13%
3. Ready-Made Clothes	35	62	57	159	93	10%
Total	167	618	1,133	2,311	2,450	13%

II. Quantity (metric tons)

	1965	1970	1975	1980	1985	Growth Rate*
1. Cloth						
a. cotton	651	1,149	353	1,151	807	
b. discontinuous synthetics	) 470	)	)	1,710	865	
c. continuous synthetics	)	)1,393	)1,091	235	99	
d. others	760	)	)	38	133	
Total	1,881	2,542	1,444	3,134	1,904	4%
2. Used Clothing	---	3,203	5,484	4,972	8,473	7%
3. Ready-Made Clothes	173	86	47	129	78	1%
Total	2,054	5,831	6,975	8,235	10,455	7%

* Compound annual growth rates computed from trend line regressions.

SOURCE: Appendix Table A-5.

detailed annual data in Appendix Table A.5. These data show, in 1978 and 1979, large increases in used clothing imports which, along with textile clothing in general, marched upwards in step with rapid increases in national income. Yet in spite of record income growth in 1980, used clothing imports dropped off, while other textiles continued to grow dramatically. The fall in used clothing imports is probably testament to the importance of the Ugandan re-export market which dried up appreciably in 1980 with the lull in the fighting there. Because external markets account for a large share of growth in Rwanda's used clothing imports, it is difficult to separate out growth attributed to purely domestic demand. Even so, collateral evidence suggests that the Rwanda's domestic used clothing market has grown steadily - that is, the demand curve has shifted outward - because of generally rising incomes. Consumption profiles by expenditure class, to be examined shortly, indicate that total domestic consumption of used clothing has most probably grown substantially over the past decades along with increases in national income.

Both cloth and tailoring, the principal components of Channel 3, appear also to be growing steadily. The value of cloth imports has increased at a rate of 14% per year over the past 20 years. Although some consumers, especially those in rural areas, require little tailoring of the cloth which they purchase to use as wraps, all indications suggest that tailoring employment has grown almost as fast as cloth imports. The number of sewing machines imported has increased at an average rate of 7.7% per year over the past 10 years.[10] While growth has fluctuated substantially, sewing

[10] See Appendix Table A.7 for detailed figures. Unfortunately, a

machine imports have clearly tended upwards over the past decade. The 7.7% figure falls in-between other available estimates of growth rates in tailoring. Vanvalli, for example, suggests that employment in rural clothing manufacture (including production of shoes as well as tailoring) increased at a rate of 20% per year between 1978 and 1983; while in making national accounts estimates, the Ministry of Plan assumes a 6% annual growth rate in tailoring employment since 1978 (Vanvalli, 1983; Ministry of Plan, 1985). All three growth rates accord with the observations of numerous tailors who confirm that total numbers of tailors have grown substantially over the past decade at least.

The value of Channel 1's imported clothing has also grown in parallel with the other channels. Imported clothing appears to have achieved an average annual growth of 10% over the past 20 years, most of this coming from increases in price and quality rather than in quantity of imports.

While no good data exist for charting progress in Channel 2, it is clear that it too has grown over the past decade. Indeed, one key feature of the textile clothing subsector has been the emergence of Channel 2 over the past 10 or so years. The first major entrant into Channel 2 launched operations in 1973; while the most recent, and largest, entered the market in 1981. Numerous large tailoring firms currently eye Channel 2 enviously, entering it from time as they are able to negotiate institutional contracts. And UTEXRWA, Rwanda's new cloth dyeing and importing firm, plans to begin production of ready-made clothes in the next few years.

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longer time series is unavailable.

Field interviews suggest that a number of the middle-sized garment manufacturers operating in Channel 2 suffer from basic management problems as well as excess capacity. Thus while the channel is likely to grow, if it does not expand rapidly, a shakeout will probably ensue with some firms closing down while others continue to enter the arena.

2. Driving Forces

Several forces, on the demand and supply sides of the textile market, direct changes in the textile clothing market. On the supply side, as Table 3 indicates, the internationally determined price of imported cloth has grown far less rapidly than consumer prices in general.[11] Hence, over the past 15 years, the real price of Channel 2 and Channel 3's packages of cloth and garment confection has dropped. The resulting drop in the real price of imported textiles (a downward shift in the horizontal textile import supply curve) has led to increased clothing expenditure (through movement along the domestic demand curve). Moreover, since about 1980 the People's Republic of China has emerged as a major supplier of cloth to Rwanda. According to the enthusiastic reports of numerous importers, the Chinese entry has contributed to this price moderation.

On the domestic scene, the launching of UTEXRWA's cloth printing operations in late 1985 has had a profound affect on the supply of textile clothing in Rwanda. By all accounts, anticipation of UTEXRWA's entry provoked substantial speculation in cloth imports as merchants hedged

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[11] Equally long price series for other textile clothing products are, unfortunately, unavailable.

TABLE 3

TRENDS IN RWANDA'S RETAIL TEXTILE PRICES

	1967	1969	1971	1973	1975	1977	1979	1981	1983
1. Drill Fabric (khaki)									
--index	100	100	98	105	185	174	202	235	275
--(Frw per meter)	(82)	(82)	(80)	(86)	(152)	(143)	(166)	(193)	(226)
2. Printed Cotton Fabric									
--index	100	106	112	150	274	296	348	394	394
--(Frw per meter)	(50)	(53)	(56)	(75)	(137)	(148)	(174)	(197)	(197)
3. Overall Consumer Price Index	100	106	108	119	210	255	336	378	429

SOURCE: Ministere du Plan, Bulletin de Statistique, Supplements Annuels, No. 1 Janvier 1974; No. 7 Janvier 1980; No. 11 Janvier 1984.

against potential protectionist measures. As Appendix Table A.5 indicates, Rwanda witnessed a particularly large upsurge of cloth imports in 1984, the year before UTEXRWA began operation. The importers' fears proved well-founded, as the Rwandan government did accord UTEXRWA a monopoly on all cloth imports beginning in September 1985. This legal monopoly lasted until June 1986 when protection was reduced to exclusive import privileges on only discontinuous synthetic fabrics.

Since the company began printing cloth, UTEXRWA has contributed to edging domestic retail cloth prices downward; because under normal tariff code provisions, they, as a manufacturer, are exempted from import duties (of 35% on cotton and 50% on synthetics) on the raw cloth they import. This allows them to sell the cloth they print at a price lower than that of imported printed cloth, which bears the full 35% and 50% import duties. It remains unclear whether or not, after inevitable start-up problems are resolved, UTEXRWA will be able to compete effectively without tariff protection.[12] Their initial requests for absolute quota protection imply that they are reluctant to face even tariff-protected competition with imports in their early stages of operation. Not surprisingly, UTEXRWA's requests for quota protection have provoked a torrent of controversy over the control of cloth imports.

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[12] Extremely crude initial indications, based on pre-establishment cost projections cited in a study by Uwiherekeje (1985), indicate that UTEXRWA might produce negative value added in cloth printing. But such a crucial calculation must be based on actual production data to allow accurate estimation of the domestic resource cost of production and current effective rate of protection, both of which will be central in making any decisions on protection.

The demand side of the textile clothing market also strongly influences market dynamics. Fluctuations in income exert probably the strongest demand-side influence. Over the past 20 years, the general upward tendency in textile imports has paralleled generally rising national income. Moreover, major upswings in total textile clothing imports - in 1978, 1979 and especially 1980 - have closely tracked upturns in GNP.

The changing profile of clothing expenditure across income groups represents one of the best means available for forecasting future demand patterns. Preliminary tabulations of the National Household Budget and Consumption Survey, displayed in Tables 4, A.1 and A.2, indicate that the composition of textile clothing purchases shifts substantially as expenditure (and presumably income) rises. As total rural household expenditure increases, absolute expenditure on all categories of textile clothing increases. While disaggregation requires caution because of the small number of cell observations for some clothing categories, several conclusions do emerge. First, Table 4 indicates that across rural expenditure quintiles the share of used clothing in total garment purchases declines markedly - from 47% to 21% - as total household expenditure rises. Absolute expenditure on used clothing remains roughly constant across rural expenditure classes, although the data do indicate a slight peak in the third quintile. Higher absolute used clothing expenditure among urban wage earning households (Table A-2) suggests that aggregate used clothing purchases may grow over the next decade. But their current 27% share in total textile clothing expenditure will decline steadily over time.

In contrast, consumer purchases of cloth and new clothes appear to increase dramatically in both absolute and relative terms as income rises. Expenditure on tailoring, while increasing absolutely across rural

TABLE 4

RURAL CLOTHING PURCHASES PER CAPITA
BY EXPENDITURE CLASS
RWANDA 1983

| | Per Capita Expenditure[a] Quintiles | | | | | Rural Average |
	Lowest	Second	Third	Fourth	Highest	
Total Consumption (Frw per household per year)						
a. used clothes	853	1,043	1,336	1,122	1,051	1,081
b. cloth	649	991	1,212	1,383	2,242	1,294
c. tailoring	82	118	112	102	233	129
d. new clothes	230	460	642	586	1,394	663
e. total textile clothing	1,814	2,612	3,302	3,193	4,920	3,167
f. total final consumption	33,821	47,459	52,629	54,124	83,896	54,360
Consumption as Percent of Total Textile Clothing						
a. used clothes	47.0	39.8	40.5	35.1	21.4	34.1
b. cloth	35.8	37.8	36.7	43.3	45.5	40.9
c. tailoring	4.5	4.5	3.3	3.2	4.7	4.1
d. new clothes	12.7	17.9	19.5	18.3	28.3	20.9
e. total textile clothing	100 %	100 %	100 %	100 %	100 %	100 %
Consumption as a Percent of Total Final Consumptions						
a. used clothes	2.5	2.2	2.5	2.1	1.3	2.0
b. cloth	1.9	2.1	2.3	2.6	2.7	2.4
c. tailoring	.2	.2	.2	.2	.3	.2
d. new clothes	.7	1.0	1.2	1.1	1.7	1.2
e. total textile clothing	5.4	5.5	6.3	5.9	5.9	5.8
f. total final consumption	100 %	100 %	100 %	100 %	100 %	100 %

SOURCE: National Budget and Consumption Survey (ENBC), Questionnaires
No. 2, 4, and 5; computation by ENBC staff.

[a]Expenditure includes cash purchases, consumption of own food production, all
barter transactions plus gifts received.

expenditure quintiles, jumps substantially in urban areas. As Appendix Tables A.1 and A.2 indicate, urban consumers demand far higher amounts of tailoring services than even the wealthiest rural households. The urban preference for tailoring probably stems not only from income differentials but also from urban fashion preferences for fully tailored clothing in contrast with the prevalence of raps in rural areas. The combination of rural and urban expenditure patterns makes it likely that demand for ready-made clothes, cloth and tailoring services will continue to grow rapidly over the next 10 to 20 years as incomes rise. Consequently, they will constitute key growth segments of the textile clothing market in the foreseeable future.

Government policy, which affects both the supply and demand sides of the textile clothing market, will also undoubtedly influence the future course of evolution in Rwanda's textile clothing market. It is that policy and its effect which will be examined in Section III, after a brief review of the economics of production and distribution in each subsector channel.

D. Economic Comparisons Among Channels

Rwanda's four textile clothing channels can be compared along several dimensions of interest to policy makers: employment generating power, income generation, equity and efficiency.

1. Employment Creation

Using an employment overlay of the basic subsector map, Figure 2 displays employment profiles for each channel. As the figure shows, tailoring employs about 12,700 full-time equivalent workers (FTE),[13] the largest effectives in the subsector. Retailers and distributors of used clothing occupy the second most prominent position. They engage the equivalent of about 4,200 full-time workers, accounting for the bulk of the 5,000 in Channel 4. Employment in the other two subsector channels falls substantially below these levels, lying at about 200 FTE's in the entirety of Channel 2 and about 65 in Channel 1.

Since not only employment but also sales vary substantially by channel, the best way to compare the employment generating power of each is to compute employment per unit of sales. Table 5, displaying the relevant calculations, indicates that Channel 3's small-scale tailors score highest as employment generators, employing 5.8 workers for every thousand francs of retail sales. Perhaps surprisingly, Channel 4's used clothing refurbishing and distribution employs 5.1 full time worker equivalents per million francs of sales, only 13% lower than that generated by Channel 3. Thus, the diversion of consumer expenditure from tailoring to used clothing

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[13] A full-time equivalent worker represents 2,000 work hours, equal to 8 hours of work per day over a five-day work week and a 50-week work year.

FIGURE 2

EMPLOYMENT AND ENTERPRISE OVERLAY:

RWANDA'S TEXTILE CLOTHING SUBSECTOR MAP*
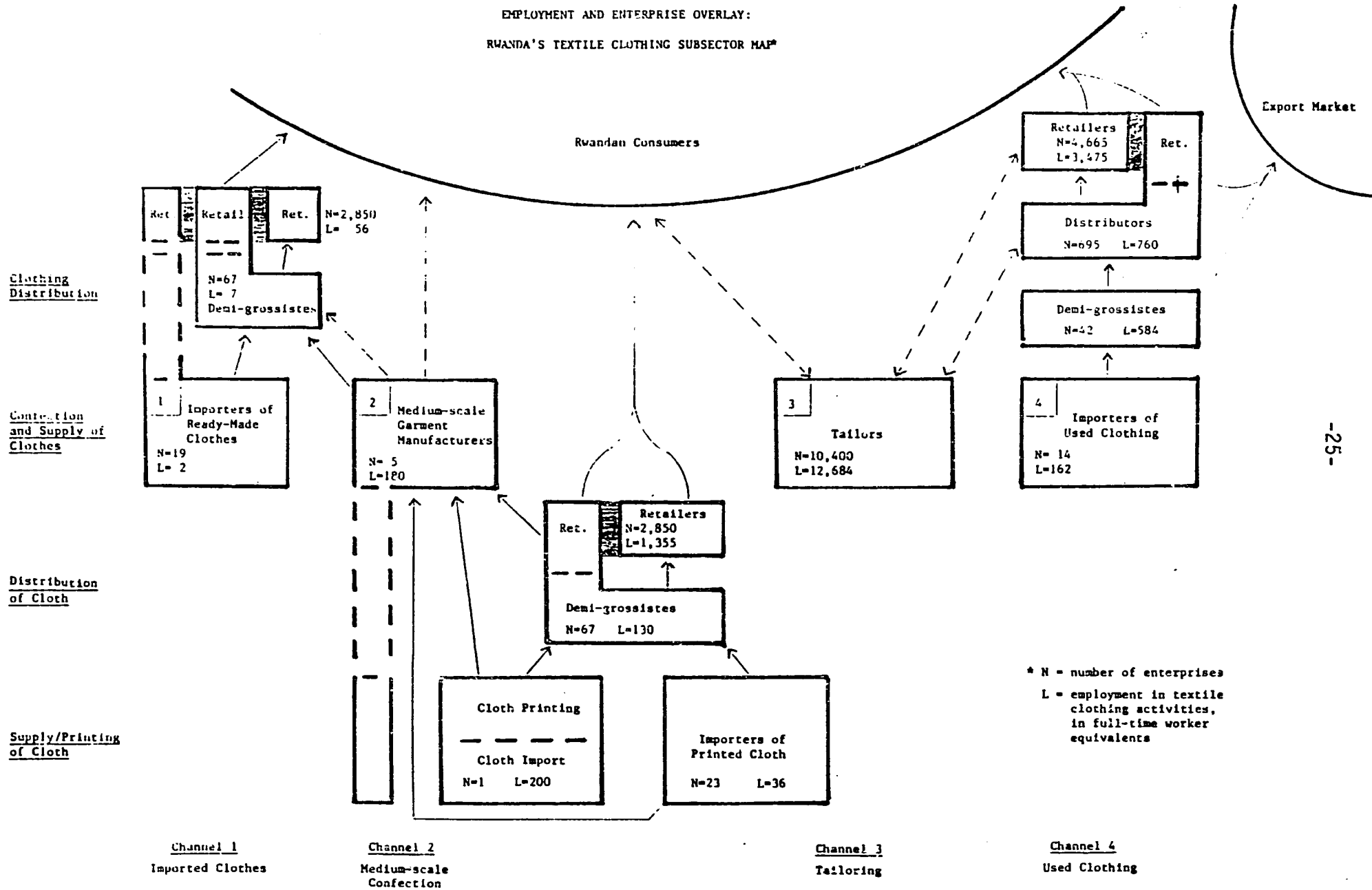
TABLE 5

RWANDA'S TEXTILE CLOTHING SUBSECTOR: EMPLOYMENT
GENERATING POWER BY CHANNEL

	Channel 1 Imported Clothes	Channel 2 Medium-Scale Confection	Channel 3 Tailoring	Channel 4 Used Clothing
1. Employment in Full-Time Equivalents[a]	65	195	13,756	5,139[b]
2. Sales (millions of Francs)[c]	347	53	2,384	1,014
3. Employment/Sales (1/2)	.2	3.7	5.8	5.1

[a]A full-time labor equivalent is equal to 8 hours of work per day x 5 days per week x 50 weeks per year or 2,000 work hours per year.

[b]Includes only employment supported by domestic used clothing sales. Calculated as 5% of tailoring employment, 33% of importer and demi-grossiste employment and 100% of retailing and distribution employment. If 10% domestically retailed used clothing is purchased at retail prices and exported fraudulently to neighboring countries, domestically supported used clothing employment drops to 4,715 and the employment/sales ratio falls to 4.7.

[c]These numbers have been rounded off in Figure 2.

SOURCE: Estimates based on field interviews, secondary employment data, trade statistics, Table 1, and 14 market enumerations.

does indeed result in some labor displacement, although the net effect is small. In actuality, the refurbishing and distribution of used clothing is nearly as labor intensive as small-scale tailoring. Moreover, because substantial used clothing transits Rwanda en route to neighboring countries, these calculations exclude from Channel 4 employment supported by foreign markets. Foreign-supported used clothing employment, occurring mainly among Rwanda's importers and demi-grossistes, represents a bonus not included in the above calculations.

Channels 2, and especially Channel 1, are far less effective in generating employment than either tailoring or used clothing. Channel 2's medium-scale textile plants employ 3.7 workers per thousand francs of sales, 36% fewer than do the tailors. Not surprisingly, the medium-scale firms' more capital intensive production technology produces fewer jobs per unit of sales than does small-scale tailoring.

By far and away the least promising means of generating textile clothing employment lies in Channel 1, which provides employment opportunities for only .2 workers for every thousand francs of sales. This minute employment generation is not surprising given the limited value added and domestic handling required in retailing imported ready-made clothes.

2. Income Generation

Used clothing and medium-scale confection generate the largest amount of value added per unit of sales among all subsector channels. The actual figures, listed in Table 6, indicate that Channel 4's used clothing

TABLE 6

RWANDA'S TEXTILE CLOTHING SUBSECTOR: DISTRIBUTION OF
VALUE ADDED BY CHANNEL
(in millions of Rwandan francs)

	Channel 1 Imported Clothes	Channel 2 Medium-Scale Confection	Channel 3 Tailoring	Channel 4 Used Clothing
1. Total Sales	347	53	2,384	1,014
2. CIF Value of Primary Raw Material	126	10.7	1,051	299
3. Other Imported Imputs and Depreciation of Imported Equipment	0	4.4	129	3
4. Value Added (1-2-3)	221	37.5	1,204	712
5. Domestic Services	27	4.1	13	4
6. Indirect Taxes				
a. Import Duties	82	4.6	450	209
b. Communal Market Taxes	0	0.0	42	129
Total	82	4.6	492	338
7. Returns to Labor and Capital (4-5-6)	112	28.8	699	370
8. Value Added/Sales (4/1)	64%	71%	50%	70%
9. Indirect Taxes/Sales (6/1)	24%	12%	21%	33%

SOURCE: Estimates based on budgets obtained during field interviews, together with
Tables 1 and A-5, and World Bank, Transport Sector Review, p. 142.

generates 70 francs of value added for every 100 francs of sales, while
that same figure stands at 71 for Channel 2, 64 for Channel 1 and only 51
for Channel 3's tailors. The low value added to sales ratio in Channel 3
likely stems from the composition of output - many cloth wraps which
require little tailoring - which is slightly different from the mix
supplied by other channels. It seems likely, too, that this composition of
output at least partially explains the low share of tailoring in Rwanda
compared with other countries.

Not only does used clothing produce the highest ratio of value added
per unit of sales, the rough evidence available suggests that average
income per worker in used clothing distribution and retailing exceeds that
earned in small-scale tailoring. Calculations based on the present study,
indicate that returns to each full time worker engaged in used clothing
distribution and retailing stand at 59,000 Rwandan francs (Frw) per year,
while the average small-scale tailor earns closer to 53,000 francs.
Although tenuous, the limited evidence available elsewhere also suggests
higher income accruing to used clothing retailers than to tailors. Using
Uwiherekeje's used clothing study, along with some plausible assumptions,
leads to an estimated 119,000 francs per year in annual used clothing
retail income (Uwiherekeje, 1985). In comparison, the Ministry of Plan's
alternative estimates of tailoring income place the income accruing self-
employed tailors at 80,000 Frw per year and that earned by employees in
tailoring shops at 60,000 (Ministry of Plan, 1986, p.18). While these data
must be interpreted with some caution, it does appear that earnings from

retailing used clothing at least equal and may well surpass those in tailoring. The apparent profitability of used clothing retailing is consistent with what appears to be rapid growth in numbers of used clothing retailers.[14]

3. Efficiency

Ideally, one would supplement the above measures with computations of domestic resource cost (DRC) and total factor productivity. Unfortunately, it was not possible during the one month available for field work, to collect the very detailed micro data required to make such comparisons. Very sketchy, pre-implementation projections for UTEXRWA indicate high DRC and even possibly negative value added in their cloth printing operation. While these very preliminary projections must not be used as a basis for decision making, they do point to the need for further careful evaluation, as accurate calculation will be required for sensible policy decisions on the very important questions of investment code privileges, UTEXRWA's requests for quantitative protection against imports, and discussions of appropriate tariff rates on competing imports. Ministry of Finance and Economy and Industrial Incentives Study staff are currently engaged in the necessary analytical work.

In the absence of better measures, retail price can serve as a rough indicator of the efficiency with which each channel satisfies consumer

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[14] A large proportion of the used clothing retailers interviewed for this study had been in business less than six months indicating high levels of entry into the business and also perhaps high levels of enterprise turnover.

clothing needs. Table 7 furnishes comparisons of retail prices by channel for a range of common consumer products. Clearly, Channel 4's used clothing supplies consumer clothing requirements at the lowest price, in fact at about 15 to 20% of the cost in other channels. While quality differences complicate these comparisons, it does appear from Table 7 that the ready-made imports retailed thr.ugh Channel 1 represent the highest cost means of satisfying consumer clothing requirements.

4. Equity

From the consumers' perspective, used clothing dominates equity considerations, because Rwanda's lowest expenditure (and presumably the lowest income) groups consume used clothing most heavily. The lowest quintile of rural consumers directs 47% of its textile clothing expenditure towards used clothing, while in the highest quintile used clothing falls to 21% of clothing expenditures (Table 4). And among still higher income urban wage earners, used clothing constitutes only 12% of textile clothing expenditure (Table A-8). Thus as income rises, consumers gradually redirect spending away from used clothing, leaving the very poor most dependent on used clothing in constituting their wardrobes.

On the supply side of the market, used clothing and tailoring dominate the other channels in provision of income to low-income groups. Apart from a small amount paid to wage laborers, income earned in Channels 1 and 2 accrues almost exclusively to Rwanda's highest income groups - importers, wholesalers and owners of retail shops. Comparing the more equity-enhancing channels, Table 8 indicates that both Channel 4's used clothing and Channel 3's tailoring generate virtually the same absolute income for

TABLE 7

RWANDA'S TEXTILE CLOTHING SUBSECTOR: RETAIL
PRICE COMPARISONS AMONG CHANNELS
(in Rwandan francs)

	Channel 1 Imported Clothes	Channel 2 Medium-Scale Confection	Channel 3 Tailoring	Channel 4 Used Clothing
1. Men's Shirts, Short Sleeves, Size 14				
a. good quality	1,500	950	1,100	200
b. very good quality	3,500	---	---	250
2. Men's Pants				
a. good quality	---	---	1,350	300
b. very good quality	4,000	---	---	800
3. Dresses				
a. good quality	2,000	---	1,400	200
b. very good quality	---	---	---	600
4. School Uniforms (boys, medium size)	---	750	450 (260-600)	---

SOURCE: Field interviews.

TABLE 8

DISTRIBUTION OF EARNINGS
IN TAILORING AND USED CLOTHING CHANNELS

| Income Recipient | Income Generated by $1,000 in Consumer Expenditure on: | |
	Channel 3 Cloth + Tailoring Services	Channel 4 Used Clothing
Poor[a]	$259	$257
Rich[b]	39	112
Government	206	333
Total	504	702

Source: Field surveys.

low-income families. But compared to tailoring, used clothing generates three times as much income for the wealthy and about 50% more tax revenue. Consequently, tailoring generates less domestic income per sales dollar but a more equitable *relative* distribution. Of course, the leverage offered by the greater used clothing tax revenue could alter the relative rankings depending on how policy makers allocate the additional funds.

5. Overview

Considering all economic criteria together, no channel absolutely dominates the others. So policy makers will have to make judgements as to which virtues they value most highly - employment, income generation, equity or efficiency. As Rwandan authorities weigh these alternatives, the most important new information emanating from this study concerns used clothing. It generates maximum income per unit of sales, supplies consumers at the lowest cost, benefits the poorest consumers most directly, and generates nearly as much employment as small-scale tailoring. Given these properties and the priorities implicit in the PRIME, it appears that policies penalizing used clothing - or banning it as has been attempted in Kenya - at the least merit reconsideration.

III. THE EFFECTS OF POLICY ON SUBSECTOR DYNAMICS, EMPLOYMENT AND EFFICIENCY

A. Trade Policy

Current tariff structure clearly favors some channels relative to others. As Table 9 indicates, used clothing bears the highest rate of import taxation of any subsector channel. The central government taxes used clothing imports at a rate of 70%, exceeding that levied on any other textile import, including finished ready-made clothes. Some observers have pointed out that since over half of all used clothing imports are re-exported fraudulently, the high import duties on used clothes represent one way of taxing consumers in neighboring countries. While this is true, used clothing remains the textile commodity consumed most heavily by Rwanda's poor. Taxing used clothing at rates normally reserved for luxury items contributes to a regressive domestic tax structure.

Another important, and hotly contested, feature of current trade policy remains that of the partial quantitative restrictions imposed on behalf of UTEXRWA. Initially, from September 1985 to June 1986, the Rwandan government awarded UTEXRWA a monopoly on all cloth imports into the country. But consumers voiced concern about the quality and reliability of cloth supply, and former cloth importers complained vociferously about their loss of market share. This storm of critical attention caused government to reconsider its position. After review, government reduced UTEXRWA's quota protection to a partial monopoly beginning in June 1986. Under the new rules, UTEXRWA has sole authority to import cloth woven from discontinuous synthetic fibers, while continuous synthetics and cloth made of natural fibers can theoretically

TABLE 9

— IMPORT DUTIES BY CHANNEL IN RWANDA'S
TEXTILE CLOTHING SUBSECTOR
. (in percent)

	Channel 1 Imported Clothes	Channel 2 Medium-Scale Confection	Channel 3 Tailoring	Channel 4 Used Clothing
1. Finished Imported Products	65	---	---	70
2. Raw Materials				
a. cotton cloth	---	35	35	---
b. synthetic cloth	---	50	50	---
3. Equipment				
a. sewing machines	---	0-15^a	15	---
b. spare parts	---	0-30^a	30	---

[a]New manufacturing establishments which import their own equipment pay no duties on either initial imported equipment or on their first batch of spare parts. All subsequent shipments are taxed.

SOURCE: Ministry of Finance and Economy, "Douanes: Tarifs des droits d'entree," Journal Officiel du 1/12/81, Decret-loi No. 21/82 du 22/9/81.

be imported by anyone.

But in practice, the Rwandan National Bank (BNR), the agency with responsibility for allocating import licenses, has great difficulty in distinguishing between cloth woven of continuous and discontinuous synthetic fibers. Given this difficulty and given the large speculative cloth imports that preceded UTEXRWA's establishment, BNR has been routinely denying import licenses for all types of cloth if UTEXRWA indicates they can supply the desired product. So in effect, UTEXRWA retains a quaisi-monopoly on cloth imports, even since June of 1986.

In addition, as a domestic manufacturer, UTEXRWA imports its cloth duty free, while importers who do not transform their imported cloth pay duties of 35% to 50%. Calculations of effective protection rates are under way by Ministry of Finance and Economy staff in conjunction with staff of the Investment Incentives Study. Although these calculations are not yet available, it is apparent from the nominal tariff structure that effective protection of UTEXRWA's cloth printing must be very high. One clear feature of trade policy has been to provide substantial quantitative and tariff protection for UTEXRWA.

Under existing trade regulations, small-scale tailors face two potential disadvantages compared to new large-scale garment producers. All existing clothing manufacturers, large and small, purchase equipment which bears a 15% import duty, while new firms large enough to import their initial stock of equipment and spare parts are exempted from this duty by existing tariff law. The initial exemption for firms large enough to import their own equipment puts small-scale tailors at a cost

disadvantage in competing with new, large firms. Given the tailors' relative labor intensity, this tends to reduce employment and raise capital and import costs in the subsector.

Moreover, new firms are also exempted from what would normally be 30% duties on their initial stock of spare parts. Yet tailors and existing medium-scale garment producers pay a price for spares which reflects the 30% duty. This not only puts tailors and existing manufacturers at a cost disadvantage relative to new large-scale producers, it also raises the cost of keeping machines in repair. The duty therefore likely increases Rwan 's total import bill by forcing machines out of service earlier than they would be if owners had access to cheaper spares.

Existing tariff structure also favors cotton cloth relative to all other natural and synthetic fabrics. The current tariff code taxes cotton cloth at 35% and synthetics at 50%. The reason for this differential is unclear, but it may lead to a subsidy for high income consumers if, as elsewhere, it is they who prefer the natural cotton fabrics.

B. Taxation

It is not possible to evaluate the full impact of tax laws on enterprises operating in the textile clothing subsector because of the confidentiality of data on direct income and profit taxes. Nonetheless, it is clear that current, sizeable indirect taxes - tariffs and market fees - put used clothing consumers, distributors and retailers at a disadvantage compared to operators in other channels. Rwanda's central government taxes imported used clothing at 70%, higher than the charge levied on any other clothing imports, higher even than levies on ready

made clothes consumed primarily by wealthy, urban consumers. In addition, local governments impose daily market fees on used clothing retailers and distributors. These market fees range from two to eight times those levied on small-scale tailors. As Table 6 indicates, these measures taken together result in government extracting as indirect taxes 33% of the retail value of used clothing sales, 24% of ready made imported clothes, 21% of Channel 2's tailoring and cloth sales, and only 12% of medium-scale garment manufacture. Given that the very poorest consumers depend most heavily on used garments to meet their clothing needs, the current indirect tax rates are regressive.

On another fiscal front, one medium-scale garment manufacturer, legally constituted as a cooperative, indicated that current tax regulations place cooperatives at a disadvantage compared to partnerships or private corporations. They allege that if two identical enterprises are registered, one as a cooperative and one as a corporation, the cooperative will pay a higher rate of tax. While time was not sufficient to investigate this contention fully, it warrants review.

C. Licensing and Commercial Regulations

Licensing and commercial regulations, for the most part, have a neutral effect on subsector dynamics, employment and the relative competitiveness among channels. But policy makers should be alerted to two potential biases so they can guard against possible future distortions.

First, BNR regulations technically require that all textiles be shipped by air, rather than by road, from Mombassa to Kigali. This

measure aims at keeping Air Rwanda's cargo plane fully employed. But it has the potential to raise the landed costs of textile imports considerably since air freight from Mombassa currently costs 42 francs per kilo, while road transport costs 19 francs. In practice, this regulation is not a significant problem, because containerized textile imports are allowed in by road given that Air Rwanda's cargo plane cannot handle containerized shipments. Since most large importers do in fact bring their cloth, clothes and used clothes shipments into Rwanda in containers, they avoid the high air freight rates. While the measure, therefore, does not currently increase landed costs or retail prices, it does discourage textile imports by small traders who cannot finance entire container loads. The practical effect of this measure is that most medium-scale garment producers have ceased importing their own cloth. It is cheaper for them to buy from local importers or from UTEXRWA.

The second potential bias, related to the first, is one that could confer on large scale garment producers a crushing cost advantage in their competition with small-scale tailors. The potential problem could arise because of the possibility of large firms importing cloth duty free while tailors would remain forced to process cloth facing a 35% to 50% tariff. This is not yet a problem because of current government interpretation of what constitutes an industrial "raw material." Present tariff law allows industrialists to import their raw materials duty free, but under current interpretations the cloth imported for garment manufacture is not considered a "raw material" because it can be retailed directly without transformation. This, along with their being too small to import entire

container loads of cloth, means that virtually none of the medium-scale confection establishments import their own cloth. So medium-scale garment manufacturers, like the consumers who have garments made up by small-scale tailors, pay cloth prices that include 35%-50% import duties.

The current interpretation is an important one to maintain, because duty free import of cloth by large garment producers would afford them a potentially overwhelming cost advantage in their competition with tailors. So that both large and small producers compete on an equal footing, one group must not be given a 35-50% price break on their principal raw material.

Note that if UTEXRWA proceeds with its plans to integrate forward into garment manufacture, they would be poised to undercut existing medium-scale producers as well as tailors simply by virtue of a 35-50% cost advantage they receive by being allowed to import their unprinted cloth duty free. Policy makers should be aware of the potentially devastating effect this would have on other producers in the subsector.

D. Credit

Importers, UTEXRWA and most medium-scale garment manufacturers appear to have adequate access to commercial credit. So too do demi-grossistes, who are frequently able to obtain supplier credits from importers. Yet small-scale tailors, used clothing distributors and retailers appear to have very limited access to formal credit.

With the small-scale tailors espec ally there may be a significant unmet demand for credit, as a large proportion of tailors - as many as 25-40% - rent rather than own machines. And they rent at substantial cost,

1,000 franc per month in Kigali and about 600 francs per month in other areas. Payments of 1,000 francs per month amortize a push-pedal sewing machine in 14 months. This may represent a profitable opportunity for an institution such as the Banques Populaires to begin lending to manufacturers. Lending to tailors would not only broaden the bank's portfolio, it would likely reduce tailors' equipment costs and accelerate their integration into the formal financial system.

E. Price Control

Current price control legislation theoretically requires all producers to submit their prices for government review by a process of homologation. Regulations also indicate that traders must all be prepared to justify their mark-ups to price control inspectors. In fact, government's capacity to implement price control regulations is feeble. They, for the most part, do not to influence the textile clothing subsector. In most cases, competition in the subsector appears substantial enough to keep prices aligned with opportunity costs. One exception is the case of UTEXRWA where a quota-protected market share and considerable tariff protection combine to make some sort of price review a necessary means of protecting consumers.

IV. OPPORTUNITIES FOR ENHANCING PERFORMANCE

Many of the basic policies affecting Rwanda's textile clothing subsector are eminently sensible. Nevertheless, there exist a number of areas in which policy makers must remain vigilant. And several opportunities do exist for improving subsector performance through policy modification. In particular, the following policy stances merit consideration.

1. Lower tariff rates on used clothing imports. This move should be given strong consideration given that used clothing currently produces the most income per unit of sales, the lowest priced clothing by far, supplies goods most heavily consumed by low-income consumers and generates only slightly less employment than tailoring. Yet current government policy taxes used clothing more heavily than any other subsector channel. At 70%, the tariff of used clothing approaches that levied on luxury items.

Reduction of market fees paid by retailers offers a related and potentially attractive option for lowering used clothing taxes. Unfortunately, the market taxes levied by communes on used clothing retailers will likely be difficult to adjust given the multiplicity of jurisdictions and the probable reluctance of communes to forego a lucrative revenue generator. Hence, tariff reduction represents the most straightforward means of providing relief to used clothing consumers.

Authorities may wish, without penalizing domestic consumers, to tax foreigners who purchase used clothing imported via Rwanda. To do so it will be necessary to accompany import duty reductions with the imposition of export duties on used clothes enforced through monitoring of demi-

grossiste sales depots and perhaps large used clothing markets near key borders. —

2. <u>Remove quantitative restrictions on cloth imports while maintaining tariff duties</u>. Such a move has much to recommend it. Currently UTEXRWA receives both tariff relief on its raw cloth imports as well as a de facto import monopoly. As a practical matter, Rwanda's National Bank (BNR) has been unable to implement the present partial monopoly accorded UTEXRWA because of the technical difficulties involved in attempting to distinguish between continuous and discontinuous fibers. In the present case, as with any system of quantitative restrictions, import license allocations must be rationed administratively, setting the stage for endless intrigue and frustration. Since Rwanda will undoubtedly be better off with efficiency-inducing price competition from imports than with a monopolist supplying the entire domestic cloth market, it seems that the easiest and most efficient solution is to allow unlimited import of competing cloth but to accord UTEXRWA tariff protection. The results of current Ministry of Finance and Economy investigations into the effective rate of protection of UTEXRWA and its domestic resource cost of production should be used in setting appropriate tariff rates on printed cloth. The current partial quota system is costly in administrative time, costly in tariff revenue foregone, effectively unenforceable and unnecessary.

3. <u>Ensure that cloth imports continue to be taxed equally for large and small clothing manufacturers</u>. This will be necessary to ensure that large and small firms compete on an equal footing. While they currently do, there is a danger that UTEXRWA's projected foray into garment

production will enable them to crush existing competitors - especially tailors and medium-scale garment producers - by virtue of their tariff exemption on imported raw cloth. If UTEXRWA moves into garment production, it will probably be necessary to levy some sort of special tax to avoid what would otherwise be government-subsidized undercutting of existing enterprises. Losses of labor-intensive tailoring would be particularly unfortunate.

4. Reduce tariffs on both sewing machines and spare parts. Removal of the 15% duty on sewing machines would allow small-scale tailors to compete on an equal footing with new larger-scale producers who can potentially import equipment duty free. And removal of the 30% duty on spare parts would make more maintenance economically justifiable, prolonging sewing machine life and therefore economizing on foreign exchange by reducing imports of replacement sewing machines.

5. Provide training in or access to sewing machine repair. Related to recommendation number 4, this also aims at prolonging sewing machine life and reducing capital costs of production. Itinerant repair persons or short training courses might well improve current maintenance standards which many tailors and equipment importers indicate are lacking.

6. Investigate, on a pilot basis, bank lending to tailors for sewing machine purchases. The Banques Populaires may be particularly well suited for reaching this clientele. The large proportion of rented sewing machines along with the substantial rental rates and therefore the potential for rapid loan repayment indicate that this might be profitable for both banks and tailors. The result would be lower cost of production

for tailors, a more diversified and more profitable portfolio for the Banques Populaires and a more rapid development of the institutional banking network.

7. <u>Review the statutes governing tax laws and cooperatives</u> to investigate the charge that cooperatives are taxed more heavily than corporations even if they operate identical enterprises.

8. <u>Actively promote both medium-scale garment manufacturers and small-scale tailoring.</u> Given the favorable long-term prospects for garment manufacture, active promotion would likely improve the ability of the textile clothing subsector to respond to the anticipated increase in demand for ready- and tailor-made new clothes. Management assistance for many of the existing medium-scale confection establishments as well as for progressive tailors, the facilitating of equipment repair and maintenance programs for all manufacturers, and perhaps short technical and design seminars for small-scale tailors might be a useful start in this direction.

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APPENDIX TABLES

TABLE A-1

·A· PROFILE OF RURAL CONSUMPTION EXPENDITURES,[a] RWANDA 1983
(in thousands of Rwandan francs)

	Total Rural Consumption Expenditure	Average Expenditure Per Household	Percent of Total Expenditure	Percent of Textile Clothing Expenditure
1. Food and Drink	11,196,356	10,553	49.0	---
2. Housing and Construction	4,577,087	4,314	20.0	---
3. Textile Clothing				
a. cloth	1,445,171	1,353	6.2	50.6
b. used clothes	932,683	873	4.0	32.6
c. new clothes	338,677	317	1.5	11.8
d. tailoring services	141,654	133	.6	5.0
(i) confection	(94,007)	(88)	(.4)	(3.3)
(ii) repairs	(47,647)	(45)	(.2)	(1.7)
Total	2,858,185	2,676	12.3	100.0
4. Other Clothing[b]	436,455	430	2.0	---
5. Household Furnishings	1,419,463	1,338	6.0	---
6. Transport	592,085	558	3.0	---
7. Other	1,930,790	1,820	8.0	---
Total	23,010,421	21,689	100.0	

[a]Includes only cash expenditures. Excludes consumption of own production.

[b]Includes items such as shoes, watches, belts and hats.

SOURCE: Ministere du Plan, "Enquete Nationale sur le Budget et la Consommation des Menages, Milieu Rural (1/11/82 - 13/12/83)," Vol. 2, Structure du Budget des Menages, Juillet 1986, Tables 1.2.A and 1.2.B. Special breakdown of textile clothing provided by ENBC staff based on questionnaire No. 4 of the daily transactions.

TABLE A-2

CONSUMPTION EXPENDITURES OF SALARIED URBAN WORKERS,
KIGALI 1982
. (in Rwandan francs)

	Average Annual Household Expenditure	Percent of Total Expenditure	Percent of Textile Clothing Expenditure
1. Food and Drink	133,327	36.5	---
2. Transport	60,636	16.6	---
3. Lodging	38,720	10.6	---
4. Textile Clothing			
a. new clothes plus tailoring services	15,707	(4.3)	56.0
b. cloth	9,132	(2.5)	32.0
c. used clothes	3,288	(.9)	12.0
Total	28,127	7.7	100.0
5. Other Clothing	5,844	1.6	---
6. Others	72,326	19.8	---
Total	365,280	100.0	

SOURCE: Banque nationale du Rwanda, Bulletin No. 9, "Special: Enquete
Budget-Consommation 1982," Juin 1983, Table 1.

TABLE A-3

TRENDS IN THE COMPOSITION OF RWANDA'S IMPORTS
(value in millions of Rwandan francs)

	1965		1970		1975		1980		1984	
	Value	Percent	Value	Percent	Value	Percent	Value	Percent	Value	Percent
1. Food	83	8.0	373	13.0	1,364	15.0	2,168	10.0	4,301	15.0
2. Drink and Tobacco	15	1.0	120	4.0	181	2.0	511	2.0	339	1.0
3. Textile Clothing										
a. cloth	132	13.0	376	13.0	558	6.0	1,467	6.0	1,734	6.0
b. used clothes	---	---	181	6.0	518	6.0	685	3.0	1,032	4.0
c. new clothes	35	3.0	62	2.0	57	1.0	159	1.0	99	---
Total	167	16.0	619	21.0	1,133	13.0	2,311	10.0	2,865	10.0
4. Other Clothes	15	1.0	23	1.0	82	1.0	262	1.0	249	1.0
5. Energy	69	7.0	162	6.0	691	8.0	2,789	12.0	4,724	17.0
6. Transportation Equipment	138	13.0	273	9.0	1,196	13.0	2,872	13.0	5,273	19.0
7. Machinery	152	15.0	214	7.0	1,309	15.0	2,887	13.0	2,947	11.0
8. Construction Materials	98	9.0	318	11.0	527	6.0	2,101	6.0	2,995	11.0
9. Others	310	30.0	808	28.0	2,440	27.0	6,667	33.0	4,179	15.0
Total	1,047	100.0	2,910	100.0	8,923	100.0	22,568	100.0	27,872	100.0

SOURCE: United Nations, Yearbook of International Trade Statistics, 1968, 1974 and 1981; Rwandan Ministry of Plan, Bulletin de Statistiques, No. 9, January 1982, and Supplement Annuel No. 10-11, January 1984; and Banque Nationale du Rwanda, Bulletins No. 12, 11, 10 and 8.

TABLE A-4

TRENDS IN THE COMPOSITION OF RWANDA'S TEXTILE
CLOTHING IMPORTS

I. Percent of Value

	1965	1970	1975	1980	1985
1. Cloth					
a. cotton	30.0	24.0	14.0	25.0	30.0
b. discontinuous synthetics	)28.0	)	)	31.0	20.0
c. continuous synthetics	)	)37.0	)35.0	6.0	3.0
d. others	21.0	)	)	1.0	3.0
Total	79.0	61.0	49.0	63.0	56.0
2. Used Clothing	---	29.0	46.0	30.0	40.0
3. Clothes	21.0	10.0	5.0	7.0	4.0
Total Textile Clothing	100.0	100.0	100.0	100.0	100.0

II. Percent of Quantity

	1965	1970	1975	1980	1985
1. Cloth					
a. cotton	32.0	20.0	5.0	14.0	8.0
b. discontinuous synthetics	)23.0	)	)	21.0	8.0
c. continuous synthetics	)	)24.0	)16.0	3.0	1.0
d. others	37.0	)	)	---	1.0
Total	92.0	44.0	21.0	38.0	18.0
2. Used Clothing	---	55.0	78.0	60.0	81.0
3. Clothes	8.0	1.0	1.0	2.0	1.0
Total Textile Clothing	100.0	100.0	100.0	100.0	100.0

SOURCE: Appendix Table A-5.

TABLE A-5

— RWANDA'S ANNUAL TEXTILE CLOTHING IMPORTS

I. Value (in millions of Rwandan francs)

	1963	1964	1965	1966	1967	1968	1969	1970	1971
1. Cloth									
a. cotton	2.6	---	50.8	150.8	115.0	174.7	---	149.5	---
b. discontinuous synthetics	)	)	)	)	)	)	)	)	)
c. continuous synthetics	)8.1	)---	) 45.6	) 140.3	) 183.2	) 233.6	) ---	) 226.1	) 115.1
d. knitwear	)	)	)	)	)	)	)	)	)
e. other	.4	---	35.3	89.8	62.0	35.1	---	---	---
Total	11.1	---	131.7	380.9	360.2	443.4	---	375.6	---
2. Clothes	3.9	11.3	35.3	65.1	58.6	47.4	35.7	62.2	16.4
3. Used Clothes	---	---	---	---	---	---	108.0	180.5	---
Total	---	---	167.0	---	---	---	---	618.3	---

II. Quantity (in metric tons)

	1963	1964	1965	1966	1967	1968	1969	1970	1971
1. Cloth									
a. cotton	28.0	---	651.0	1,129.0	---	---	---	1,149.0	---
b. discontinuous synthetics	)	)	)	)	)	)	)	)	)
c. continuous synthetics	)111.0	)---	) 470.0	) 910.0	) ---	) ---	) ---	)1,393.0	) ---
d. knitwear	)	)	)	)	)	)	)	)	)
e. other	33.0	---	760.0	1,030.0	---	---	---	---	---
Total	172.0	---	1,881.0	3,069.0	---	---	---	2,542.0	---
2. Clothes	27.0	114.0	173.0	143.0	---	---	---	86.0	---
3. Used Clothes	---		---	---	---	---	1,898.0	3,203.0	---
Total	---	---	2,054.0	---	---	---	---	5,831.0	---

TABLE A-5 (CONT.)

I. Value (in millions of Rwandan francs)

	1972	1973	1974	1975	1976	1977	1978
1. Cloth							
a. cotton	79.7	---	183.8	160.9	162.5	140.0	236.4
b. discontinuous synthetics	)	)	)	)	303.1	306.4	394.5
c. continuous synthetics	)153.0	)24.4	) 372.1	) 396.8	140.2	106.0	171.4
d. knitwear	)	)	)	)	48.7	11.0	38.8
e. other	---	---	---	---	8.3	9.7	4.1
Total	232.7	---	555.9	557.7	662.8	573.1	845.2
2. Clothes	23.6	13.8	49.2	57.1	41.4	32.8	75.4
3. Used Clothes	219.0	---	321.7	518.2	537.8	638.3	711.5
Total	475.3	---	926.8	1,133.0	1,242.0	1,244.2	1,632.1

II. Quantity (in metric tons)

	1972	1973	1974	1975	1976	1977	1978
1. Cloth							
a. cotton	371.0	---	529.0	353.0	256.0	243.2	344.7
b. discontinuous synthetics	)	)	)	)	913.6	847.5	1,047.9
c. continuous synthetics	) ---	) 54.0	) 947.0	)1,091.0	195.2	153.2	233.5
d. knitwear	)	)	)	)	59.2	17.1	49.2
e. other	---	---	---	---	9.8	8.2	4.6
Total	---	---	1,476.0	1,444.0	1,434.0	1,269.2	1,679.9
2. Clothes	---	14.0	39.0	47.0	36.2	30.6	58.8
3. Used Clothes	3,511.0	---	3,755.0	5,484.0	5,209.6	6,117.4	5,916.0
Total	---	---	5,270.0	6,975.0	6,679.8	7,346.5	7,654.7

TABLE A-5 (CONT.)

I. Value (in millions of Rwandan francs)

	1979	1980	1981	1982	1983	1984	1985
1. Cloth							
a. cotton	373.4	589.8	689.6	586.3	514.5	755.9	730.1
b. discontinuous synthetics	542.6	723.9	604.5	488.0	425.2	841.2	488.1
c. continuous synthetics	180.2	128.7	124.7	162.3	79.5	68.7	82.3
d. knitwear	21.9	24.4	7.7	25.4	41.8	67.0	76.5
e. other	10.3	.6	5.7	2.0	.8	1.3	.9
Total	1,128.4	1,467.4	1,432.2	1,264.0	1,061.8	1,734.1	1,377.9
2. Clothes	83.2	158.6	142.7	171.4	125.9	98.7	93.4
3. Used Clothes	737.2	684.8	740.5	856.6	993.8	1,032.1	978.7
Total	1,948.8	2,310.8	2,315.4	2,292.0	2,181.5	2,864.9	2,450.0

II. Quantity (in metric tons)

	1979	1980	1981	1982	1983	1984	1985
1. Cloth							
a. cotton	524.7	1,150.6	845.1	722.0	595.8	887.2	807.2
b. discontinuous synthetics	1,388.3	1,710.1	1,338.8	906.8	747.1	1,462.1	865.1
c. continuous synthetics	203.8	234.7	143.5	189.5	99.6	98.3	98.7
d. knitwear	24.2	36.9	9.7	38.6	58.9	112.9	132.0
e. other	11.6	1.5	5.3	1.5	1.0	.9	.7
Total	2,152.6	3,133.8	2,342.4	1,858.4	1,502.4	2,561.4	1,903.7
2. Clothes	52.3	129.4	88.3	152.7	104.0	121.7	78.1
3. Used Clothes	5,544.3	4,971.6	5,638.0	6,552.0	7,767.7	8,276.0	8,472.7
Total	7,749.2	8,234.8	8,068.7	8,563.1	9,374.1	10,959.1	10,454.5

SOURCE: United Nations, Yearbook of International Trade Statistics, 1968, Vol. 1, 1974, and Vol. 1, 1981; Banque nationale du Rwanda, Bulletins No. 12, 11, 10 and 8.

TABLE A-6

— TRENDS IN SEWING MACHINE IMPORTS

	Value (millions of Frw)	Quantity (tons)	Estimated Number of Sewing Machines
1976	16.0	43	1,204
1977	10.5	48	1,346
1978	18.9	80	2,245
1979	33.8	141	3,975
1980	39.5	161	4,524
1981	32.0	126	3,547
1982	46.9	194	5,461
1983	35.6	126	3,562
1984	36.6	144	4,051
1985	22.3	70	1,966

SOURCE: Banque Nationale du Rwanda, Bulletins No. 12, 11, 10 and 8.

TABLE A-7

ESTIMATES OF THE RELATIVE IMPORTANCE OF TEXTILE EMPLOYMENT

	National Employment, 1978			Rural Nonfarm Employment, 1983		
	Total Employment	Percent of Nonfarm	Percent of Manufacturing	Total Employment	Percent of Nonfarm	Percent of Manufacturing
1. Agriculture	2,420,951	---	---	---	---	---
2. Mining	14,014	11.0	---	11,000	5.0	---
3. Manufacturing						
--wood products	6,439	5.1	42.0	17,492	8.5	36.0
--bricks	---	---	---	12,215	6.0	25.0
--clothing	4,073[a]	3.2	27.0	9,508	4.7	20.0
--food processing	3,019	2.4	20.0	1,338	.7	3.0
--metal work	1,079	.9	7.0	7,069	3.5	15.0
--other manufacturing	526	.4	4.0	---	---	---
Total	15,130	12.0	100.0	48,647	24.0	100.0
4. Construction	16,219	13.0		29,108	14.0	
5. Commerce	14,957	12.0		32,493	16.0	
6. Government	30,322	24.0		23,891	12.0	
7. Private Services	) 35,527	28.0		49,061	24.0	
8. Other	)			9,585	5.0	
Total Nonfarm	126,169	100.0		203,785	100.0	
Total	2,547,120					

	Urban Informal Sector, Kigali, 1985		
1. Agriculture	---	---	---
2. Mining	88	1.0	---
3. Manufacturing			
--wood products	432	3.8	14.0
--bricks	228	2.0	7.0
--clothing	958[b]	8.5	31.0
--food processing	354	3.1	12.0
--metal work	413	3.7	13.0
--other manufacturing	705	6.3	23.0
Total	3,090	27.0	100.0
4. Construction	1,062	9.0	
5. Commerce	6,117	54.0	
6. Government	0	---	
7. Private Services	897	8.0	
8. Other	0	---	
Total Nonfarm	11,254	100.0	
Total			

TABLE A-7 (CONT.)

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[a]Includes clothing and shoe repairs.

[b]Includes tailoring (648) and knitting and embroidery (310).

SOURCE: National employment from: Republique Rwandaise, Presidence de la Republique, Bureau National de Recensement. "Recensement General de la Population et de l'Habitat, 1978," Vol. 2, Activite Economique; rural nonfarm employment from Vanvali, "Reflexions Interrogatives Sur l'emploi rural nonagricole au Rwanda en 1983," mimeo. MINIPLAN; urban informal sector from International Labor Office, "Recensement des artisans dans la commune urbaine de Nyarugenge (Kigali)," August 1985, Table 1.

TABLE A-8

— PROFILE OF USED CLOTHING CONSUMERS IN
THREE MARKETS[a] IN RWANDA

I. Profession	Number of Consumers Interviewed	Percent
Farmer	14	60.0
Student	2	9.0
Domestic	2	9.0
Housewife	2	9.0
Civil Servant	2	9.0
Professional	1	4.0
	23	100.0

II. Share of Used Clothing in Wardrobe		
0 - 50 percent	4	17.0
51 - 70 percent	6	26.0
71 - 90 percent	8	35.0
91 - 100 percent	5	22.0
	23	100.0

[a]The three markets include Nyanza, Ruhango and Nyabugogo.

SOURCE: Speciose Uwiherekeje, "La Commercialisation de la Friperie an Rwanda et son Importance pour le pays," Memoire de License, Faculte'des Sciences Economiques, Sociales et de Gestion, Butare, September 1985, p. 66.

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