

## A GENDER PERSPECTIVE ON TRANSPORT AND ACCESSIBILITY IN OFF-ROAD AREAS: THE CASE OF WOMEN TRADERS IN GOMOA, COASTAL GHANA

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### I Background

Marketing is a major responsibility for women in coastal Ghana. In many districts they face considerable difficulties in getting their goods to market, particularly when they are resident away from the paved road. Feeder roads and tracks deteriorate rapidly in the rainy season and settlements only a few miles from the tarred road can become relatively inaccessible. Many traders will not visit such settlements during this time and consequently prices are depressed. Women must headload their produce to the nearest motorable road if they are to obtain better prices. The objective of this research undertaken in Gomoa district, Central Region, was to work with women traders and local transporters to explore the potential for improving market access for women residents off-road. Five research questions were considered in the field study:

1. What is the current organisation and cost pattern of transport services in off-road areas (regarding links to the main market centres utilised)?
2. What are the particular needs and difficulties of women traders in a small number of selected off-road settlements (and to what extent are they transport related?)
3. Most transport is owned by men. Is there potential to develop women run/owned transport services?
4. What potential is there for various types of intermediate transport use in the specific local cultural context and what would be the implications of its use for women's trading activities?
5. Could electronic communications (such as mobile phones) play a role in improving market information? Would this have transport implications?

The field work took place principally in May and September 1998. The aim was to pick up seasonal contrasts and changes in perceptions related to variation in rainfall and associated road and crop production/output conditions. However, in 1998 remarkably little rain had been received in the research district even by the end of September (or indeed along the coastal zone as a whole), a condition locally attributed to the global impact of the phenomenon known as El Nino, with serious implications for local agriculture.

The work started in May 1998 with the selection of settlements for detailed research and the first survey of current transport services and deficiencies in those off-road settlements, with reference to user charges, frequency of services, transport types, ownership etc. Current needs and difficulties of traders were also ascertained at this time and preliminary work on the potential for women owned/run services undertaken. A variety of techniques were drawn on in this work, including key informant interviews using checklists, focus group discussions

(with separate groups of men and women plus some mixed groups), transect walks and 'perambulations'. The work was conducted with the assistance of a local woman who acted as translator. Between May and September the first data set was analysed and secondary material collated, while two Ghanaian researchers collected background and related information, one working in local market centres on market prices and conditions, the other on vehicle and spare part costs and availability in the cities of Accra and Kumasi (where Gomoa transporters tend to make their major purchases). In September, feedback was provided to the participating villages on the results of the May work and further studies took place in the villages, assisted by the same local woman as translator and also, this time, with the assistance of one of the (male) Ghanaian researchers who conducted interviews with men. This phase of work focused on transport problems in the midst of the maize harvest period and the potential for IMTs (Intermediate Means of Transport), utilising a set of photographs provided by the IFRTD secretariat as the basis for a series of separate focus group discussions with women and men. (The results reported below focus primarily on the work conducted with women).

## **II The study area**

Gomoa district, in Central Region, is one of Ghana's poorest coastal districts. It is located in very largely in the coastal savanna belt; the climate is characterised principally by a bimodal rainfall distribution and a mean annual rainfall of between 70 and 90 cm along the coast, and 90 to 110 cm in the northernmost area where savanna gives way to semi-deciduous forest.

Gomoa is principally an agricultural district and the main crops grown are maize (often the major cash crop), cassava (grown both as a food crop and, generally to a lesser extent, as a cash crop), peppers and tomatoes (both the latter grown as cash crops and, in the case of green pepper, sometimes as an export crop). Maize occupies the largest acreage according to the District Development Plan (May 1996). This document refers to the high potential for grain production and the development of large-scale export production of pineapples and pepper. However, current constraints include unreliable rainfall, lack of credit for farmers, fluctuation in agricultural prices, high input costs and poor roads. Labour shortage is also a problem in many areas: youths have migrated out of Gomoa to the forest zone where they are engaged in cash crop cultivation. This can be linked to the currently limited agricultural production in Gomoa and suggests a vicious circle whereby labour migration is encouraged by the relatively underdeveloped state of agriculture and labour shortages help perpetuate low productivity. Communal labour parties (nnoboa) for agricultural work are still common in this area and shifting cultivation without the use of any fertiliser is widespread.

Central Region has a relatively good road network compared to northern Ghana, for example, but the condition of roads is frequently very poor. In a recent survey of road conditions in Ghana, only 2% of all roads (including earth and paved) in Central Region were classified as 'good', compared to 67% classified as 'poor' and 31% as 'fair' (Wilbur Smith Associates 1998). Gomoa district appears from casual perusal of road network maps to be relatively well provided with roads, but the majority of these are classified as 'gravel', and on inspection are frequently found to be indistinguishable from earth tracks, since in the rolling topography of

Gomoa the gravel surface is rapidly lost during the rains and gulleys appear.

The condition of local roads and paths is of particular concern to women in Gomoa, since they are the principal agricultural produce traders, travelling extensively both within and outside the district to market their own and their husbands' produce and returning home with other items which have been purchased for resale in their village area. In addition to trading, most women are involved in farming (sometimes on their own account, sometimes in conjunction with their husband) and a host of household activities including water and fuelwood headloading and the headloading of most of their own and their husband's produce from the fields to the village.

Four villages located off the paved road were selected for detailed study: Adabra, Lome, Sampa and Abora. A brief resume of the characteristics of each village is provided below. All are primarily Fante villages, though stranger farmers from other parts of Ghana are also resident in each of the villages.

**Adabra** is located in north-east Gomoa, in a region of moderately good rainfall and mixed gravel/sandy loam soils. The settlement's farmers grow maize, cassava, pepper, yam and some tomatoes and groundnuts for sale, with maize and cassava as the principal crops. The farmers here have ample land and most also have sufficient labour. Ewe and other stranger farmers have settled in the village, providing additional labour.

Adabra is approximately five miles from the nearest tarred road. The tracks which connect it to the tarred road was badly eroded in May with many potholes. It was reported then that the road out of Adabra is sometimes impassable in years of heavy rains for long periods, notably in June and July. Local chiefs had apparently made requests to the district administration for assistance with road improvement in the area. The road contract was reportedly awarded at one point but the contractor absconded before the road was built.

Up to about 25 years ago Adabra was an important market centre. Nowadays the village is relatively small (particularly by comparison with Sampa and even Lome) and the poverty of its inhabitants is indicated by such features as the predominance of thatch roofs and general lack of infrastructure. The loss of the market is much regretted and blamed on deterioration of local roads. In May local women complained particularly about the cost of taking goods to market at Kasoa fifteen miles away (the main market centre for this area), saying they had insufficient funds to pay transport fares, even when the road is motorable, and thus were forced to headload their wares. On other occasions, they complained, if they had funds for transport, all the vehicles passing through the village would be full.

By September there had been a remarkable change in perceptions of accessibility in Adabra among both men and women, as a result of grading of local roads in June, limited rainfall since the road grading had occurred, and the incidence of the main maize harvest which, though lower than normal due to low rainfall, still brought sufficient money into the local economy to enable most women to pay the fare to Kasoa (which remained at the May price) and the frequency of vehicles passing through the settlement to increase. Women travel with their produce and pay the driver after they have sold it. Accessibility is not, for the moment,

seen as a major issue. The change in conditions at Adabra emphasises the need for seasonal studies of transport and accessibility, since perceptions can change substantially between seasons, depending on the amount of money in circulation in the local economy and the changing state of local roads (dependent, in turn, on such factors as the point reached in the agricultural cycle, the amount of rainfall recently received and road improvement programmes in progress).

**Sampa** is located in western Gomoa, north of the Accra-Cape Coast road in an area of clay/gravels with moderate rainfall. It is larger and somewhat more prosperous than the other off-road settlements selected for detailed study and has some substantial buildings, including the chief's palace. A wider range of crops are cultivated here: tomatoes, oranges, palm oil, sugar cane and pepper, in addition to maize and cassava. Maize, cassava and oranges are all produced in sufficient quantities to attract regular visits from local wholesale dealers.

Sampa is situated about 5 miles from the main road; the first mile from the main road was once tarred (reportedly in 1956) but is now badly eroded. The remainder, apart from a small tarred section at Sampa Junction, is untarred with corrugations. Along steeper sections of the road there is severe gulying and the road becomes very narrow. It is impassible after heavy rains. The road was last repaired three years ago when the children of a local chief paid for a grader in order to make the road motorable for their father's funeral. In May the current chief had recently been to Accra to request assistance from the Minister of Roads and Transport and had been promised help 'at some time in the future'. In September the situation had been somewhat improved by the grading of roads in the vicinity, though the road out of Sampa itself was still difficult.

It is usually easier to find transport by taxi rather than tro-tro (minibus) from the junction to Sampa because the tro-tro owners often say that there are too few goods and passengers at Sampa to make their journey worthwhile, given the nature of the road. Two women produce dealers bulk much of the local produce in Sampa and take it to market, because many women there cannot afford the fare to market, particularly if they have only a small amount of produce to sell. These and other Sampa women mostly travel to Kyiren Nkwanta, five and a half miles away and their closest market centre, to sell their produce. Some also visit the markets at Mankessim and Kasoa along the main Accra - Cape Coast road which bisects the district.

**Lome** and its associated temporary farm settlements are located in an area designated by the Gomoa district administration's maps as a 'Potential Agricultural Region'. The area has moderate to good rainfall in a bimodal distribution and soils are a mix of gravels and sandy loams.

Lome is located just under 4 miles from the nearest tarred road along a narrow graded track with some corrugations and other signs of erosion. Associated with the main, fairly large, settlement at Lome are about 20 temporary farm settlements where shifting cultivation has been practised by Lome farmers for around 40 years. Access from Lome to the temporary farm settlements is by footpath only: motor vehicle access is impossible.

Farmers at the temporary settlements sleep in barns ('osan') during the farming season,

returning only at weekends to the parent settlement. The temporary settlements are occupied by men and their wives: about 20 farmers or so may be based in each. Women return to Lome when there is less work for them to do.

Lome women spend a great deal of time at and after harvest carrying crops between the temporary settlements and the parent village. Maize is the principal crop grown because cassava is too bulky in its unprocessed state to justify head loading to Lome. According to the farmers, if they had a corn mill at the temporary farm they would grow cassava and process gari. Maize is headloaded daily to Lome by women in the harvest season. Apparently there used to be storage barns at intermediate points, but these are no longer utilised because of theft: nowadays barns must be either in Lome or at the temporary settlement. Some farmers remain in the temporary settlement after harvest to guard the maize crop and to grow tomatoes, garden eggs and pepper in the minor season. (Tomatoes are carried back to Lome every four days, peppers preferably within one day of harvest and a maximum of three to four days).

Produce is taken beyond Lome by women to local markets, notably Dewuramong (four miles away) and, to a lesser extent, Swedru (about thirteen miles away). Many years ago, Lome had its own market (on Tuesdays and Fridays) which apparently dealers from Swedru and even Accra patronised. It reportedly declined due to the movement of nearby settlements to the tarred road, and the consequent expansion of Dewuramong market (also held on Tuesdays and Fridays). There is now some talk of reviving the market at Lome since vehicles do not always come to Lome to take its women to other market centres. However, this seems unlikely to occur without careful planning and concerted action on the part of local inhabitants.

**Abora**, the fourth settlement studied, is located just south of the main Accra - Cape Coast road in an area of somewhat difficult clay soils and relatively low and sporadic rainfall. The improved 110 day maize variety is cultivated in this area; this grows well but is susceptible to weevils. Other crops grown include cassava (for home consumption) and recently a number of farmers have started cashew production. Fuelwood, sold in local markets to fish smokers, is a major income earner for women. This is the smallest and poorest of the four settlements studied and, indeed, is poorer than many other Gomoa villages. No one, for instance, owns a grinding machine - women have to take their maize to the settlement at the tarred road for grinding; there are no stores or kiosks; and physical infrastructure of all types is very limited.

Abora is only 2 miles from the tarred road and provides evidence of the difficulties that even settlements a short distance from good transport can experience. It is located on a rough narrow track which is reportedly totally impassable in periods of heavy rain and for up to three days afterwards. The village elders have made the decision to move to a new site, three quarters of a mile closer to the main road, in order to ease their access problems. The fact that the settlement has few facilities makes the decision to move feasible, though the relocation will apparently occur over a long period since villagers do not generally have the funds to build new houses.

### III The current organisation and cost pattern of motorised transport services

Motorised transport services from and to off-road villages are extremely restricted and mostly dependent on vehicles coming in from the paved road, rather than on off-road village based transport. Vehicles are privately owned and often owner driven or driven by a relative of the owner. The most common vehicles operating to the villages are minibuses (tro-tros) and passenger cars used as taxis for the transport of passengers and goods. (Motor cycles and mopeds [mobylettes] are remarkably rare; a major contrast with Francophone regions of West Africa - see Dawson and Barwell 1993:42. There are motor cycles on sale in Kumasi and Accra but many of the customers are, apparently, Ivorians)

Taxis generally charge higher rates than tro-tros over the same distance. Transport charges are mostly higher per unit distance along unpaved roads and when road conditions are very bad drivers will not take their vehicles along such routes. Some vehicle owners who regularly ply off-road routes reportedly have to replace (second-hand) tyres every month. (A tyre for a passenger car can cost up to 200,000 cedis when purchased new.) On local market days services to off-road villages in the market's vicinity are usually better than average: the driver may arrive at the village and load the vehicle with goods the evening prior to market or very early on market day, and then picks up his passengers (all the drivers encountered have been male) and brings them back from market at the end of the day. Large trucks do not generally visit these off-road settlements. Details are presented below for the four settlements in turn.

At **Adabra** the residents are totally dependent on outsiders for motor transport. One man, a farmer, owns a car which he bought three years ago from the proceeds of his cassava and gari production. A year later he had enough money to purchase the engine. At first he operated the vehicle as a taxi from Adabra (it is driven by a brother), but the road was so bad that he decided to move it to a base at Liberia Camp near Accra. On Kasoa market day there are usually plenty of vehicles passing through, particularly now that the road has been graded, though if there are heavy rains the road may be closed and cassava, in particular, can be spoilt unless processed as gari. Given the weight to price ratio of cassava it is less profitable to headload than maize. Sometimes, all the vehicles are already full before they reach Adabra. On non-market days there are usually occasional vehicles passing through the town to Swedru and in the harvest season mammy wagons and tro-tros are brought in by stranger traders for the collection of maize. It costs 700c by tro-tro from Adabra to Kasoa market (a distance of about 15 miles, five of which are untarred) and 1,200 cedis per sack of cassava.

**Sampa** residents, like those at Adabra, are dependent on outsiders for transport services: no cars are kept in the town. Of fifteen women asked in September whether they had used motorised transport in the past seven days only five had done so (mostly to travel to their local market at Kyiren Nkwanta), although this is the season when much maize is sold. On the evening before market days at Kyiren Nkwanta four or five taxis or tro-tros may come to Sampa to load their vehicles. They set off for market with the traders at dawn and bring them home again when all their goods are sold. There are apparently a number of different cars which may or may not come. On non-market days only two or three vehicles will visit the settlement, at most, and usually it is necessary to walk to the road junction about a mile away to find a vehicle, since they generally only come on non-market days if chartered. It costs 600

cedis per person and 1,000 cedis per minibag of maize to travel to Kyiren Nkwanta by tro-tro (about five and a half miles, virtually all along poor, unpaved road), 1000 cedis per passenger by taxi. The journey to Mankessim (about 24 miles away, including five miles of unpaved road) costs more: 1,000 cedis by tro-tro and 1,200 by taxi; consequently most women travel to Kyiren Nkwanta to sell their maize. There are many women in Sampa, however, who do not have sufficient money for transport and walk to Kyiren Nkwanta market regularly with their own and their husbands' produce (a greater number than women who travel by vehicle), some even headloading cassava (the heaviest crop grown). They return with a smoked fish and other items for sale in the village. It takes, they say, about one and a half hours when carrying a load.

Sometimes women who travel to more distant markets are unable to find transport to take them home. Women who expect to be away overnight ask their husband for permission to do so. Occasionally, absence without permission may result in a suspicious husband following his wife 'to see what she is doing'. Husbands say they do not like the inconvenience when their wives are unable to return home and thus not available to prepare supper.

**Lome** is more fortunate than the previous two settlements in having one vehicle - a (Toyota) tro-tro - stationed in the village at night, though the vehicle is actually owned by a man resident in Swedru. This vehicle is used for a wide variety of journeys and has no regular route. No one in the village owns a vehicle of any sort. On Dewurampong market days, six to ten vehicles - mostly tro-tros - come to Lome to pick traders up, and a further three to five arrive on Swedru market days (Monday and Thursday). On Sundays, two vehicles leave Lome but do not return in the evening. The cost of travel to Dewurampong, the closest market, four miles distant (and almost all along unpaved road), is 300 cedis per passenger by tro-tro (a sum which seems to be within the reach of almost all women residents), 400 cedis by taxi. A minibag of maize will cost 5-600 cedis on the same route by tro-tro and 7-800 cedis by taxi. Almost all women seem to be able to afford the tro-tro fare to Dewurampong. In Lome, as in the other settlements, women are unable from time to time to return home the same night if they travel to distant markets to sell their produce. They are similarly expected to obtain the prior permission of their husband.

**Abora** also has a vehicle stationed in the village at night: in this case a taxi owned by a woman trader who is resident in the village (see section VII for further discussion). However, the taxi works from the paved road, and merely makes an early morning run to the road and a late evening run back to the village, when the driver has completed his work for the day. Other transport only comes to the settlement if someone from outside has reason to make the journey to Abora, for instance dealers who come to purchase crops. Consequently, even on local market days the usual mode of transport for Abora's own traders travelling to the paved road is on foot. It costs 200 cedis to travel by tro-tro or taxi the two miles from the nearest market centre at Apam Junction to Abora, and about 3000 cedis per load (depending on size). There is no motorable road, merely a narrow four mile long footpath, to the coastal market centre and district headquarters at Apam, and consequently only pedestrian traffic in this direction. Since Apam is a major fish smoking centre and market for fuelwood, traffic along the footpath is heavy.

#### IV Non-motorised transport use

Non-motorised transport, apart from pedestrian headloading (which is ubiquitous), is remarkably rare in Gomoa, has generally been obtained within the last few years, and is almost wholly owned and operated by men. Once transport involves equipment it has a tendency to become a male preserve in Ghana as in other regions of Africa. Current non-motorised transport types comprise only bicycles and hand carts but mostly consist of bicycles purchased by men for cash out of farming or hunting profits (this is an area where small game is still common and hunting widespread). Few women, to date, have ever ridden a bicycle and, if so, are generally young women who have mostly done so within the village centre, 'for pleasure'. Men do not generally loan out their bicycles to their wives. Hand carts are principally found in the district capital, Apam, and hardly encountered in rural areas (though two of the study villages had carts).

Discussions with staff at the Feeder Roads Department in Accra and Cape Coast indicated that there may be some resistance to non-motorised transport in coastal Ghana, though purchase cost is also an important question, particularly since these items are generally obtained as cash purchases. A basic bicycle of Chinese/Asian manufacture (such as the Phoenix brand) costs from about 120,000 to 150,000 cedis and a new bicycle tyre costs around 12,000 cedis. The new tyre may well last less than six months on poor roads and tracks. Second-hand tyres can be obtained much more cheaply from vulcanisers, but are reckoned by those with sufficient funds to purchase new tyres to be a bad investment since they are very rapidly spoilt. In some villages certain bicycle owners hire out their bicycles at a rate (200 cedis in Sampa) per five minute interval! Details of non-motorised transport availability and use are presented for the four study settlements below. The issue of IMT acceptability is discussed further in section VI.

In **Adabra** just six men own bicycles and in September all except one (the primary school headmaster's, which he mends himself) were reportedly off the road. There is no bicycle repairer in the village. Women here say they can neither ride nor afford to buy bicycles, though some have occasionally borrowed a husband's to ride within the village. One man owns a small four-wheeled hand cart which he purchased for cash from a local manufacturer in Accra and rents out at between 1,500 and 3000 cedis per day (according to load and distance) to men and women (who use it mainly to transport crops to neighbouring villages and from their farms to the village). The cart cost 150,000 cedis and third-hand tyres from the vulcaniser cost 8-10,000 cedis per tyre. They have been changed several times since purchase of the cart eighteen months ago. Nonetheless, the owner is pleased with his investment.

In **Sampa** there are only three bicycle owners, all men, and as in Adabra their wives only ride the bicycles very occasionally ('for pleasure') and only within the village. Women say they are simply too poor to buy bicycles. Owners in Sampa hire out their bicycles to other men at c. 200 cedis per 5 minutes. They are hired for cycling to nearby settlements. There are no hand-carts in the settlement.

**Lome** has about ten bicycles, again all owned by men. These are mostly the standard Chinese/Asian makes, but two men have apparently recently purchased mountain bicycles with



gears which are much admired. However, one has already broken. Some of the bicycles are rented out to young boys in town and seem to have been purchased with this in mind. According to discussions with women in Lome, husbands do not usually loan their bicycles to their wives, though the women were unclear about the reasons (they noted that many women do not know how to ride). Very occasionally women get the chance to try riding round the village for pleasure, when a bicycle has been brought into town for hire. The Chief's niece, a major trader in her 40s, described how she had taken such a bicycle on one occasion and ridden it to the next village, 'just for fun'.

One bicycle owner at Lome, a hunter/farmer who has an unusually sturdy Raleigh with a double cross-bar, said that he loans his bicycle to his wife and she rides it occasionally to a nearby farm but 'because she has a child on her back she cannot take it very far'. He admits that she would like to use it more, but argues that he needs it himself. He never loans it out, which may partly explain why it is in such good condition. He purchased the bicycle for cash, new, five years ago at Swedru, the nearest major town, and paid 80,000 cedis for it: bicycle prices have risen substantially over the last few years. He buys second hand tyres at 4,500 cedis per tyre from Swedru (sending money with any of the drivers who come to Lome) and has to change his tyres every two months; fortunately, Lome has its own bicycle repairer who repairs the spokes when they break. The bicycle is used for riding to the paved road and onwards to nearby centres such as Afransi and Apam Junction, but also nearly every time the owner goes to his farm. He uses it in this case for carrying small quantities of goods (carrying some things on his head, others on the bicycle) but observed that the footpaths are potholed in places, making cycling with a load difficult. When harvesting is in full swing headloaders are employed (mostly women) rather than the bicycle.

Lome also has two small hand carts. These were made by the owner himself, a mason/farmer, in the village about a year ago. The wheels are solid and made of wood (unlike the standard manufactured cart), and rubber tread has been pasted on. They cost the owner 55,000 cedis in total for the two carts in construction costs. Like that at Adabra, these carts are hired out to men and women who use them to take their maize over the four miles to the junction (for which a charge of 6,000 cedis is made for a full load), or from their farm to the village (charged at between 2,500 and 5,000 cedis, depending on the distance). However, the carts are principally used for transport of construction materials during house building, since only those who do not have relatives available to help carry their produce will pay to hire the cart. (Relatives are simply given a small portion of maize for their assistance.) The owner or his brother always accompanies the cart when it is hired out.

In **Abora** there are no hand carts, but the village now has three bicycle owners (five years ago there were none): one man (a hunter), one schoolboy (whose brother in Takoradi had purchased it for him) and the only woman cycle owner encountered in the district. The latter, an ADRA (Adventist Relief Agency) 'motivator', is purchasing the machine, a Chinese 'Hero', at a total cost of 130,000 cedis on installments through her work. She had had the bicycle for one year at the time of first interview in May 1998 and for the previous two months it had been out of use due to loose bolts, a broken pedal and a split inner tube. She did not have the 12 - 18,000 cedis estimated repair cost and had not received assistance from her employer for the repair. She blamed the damage to the bicycle on the fact that she loans it out

often to friends and the village children (without charge). In September her bicycle was still broken. The hunter, who has a Phoenix cycle, purchased it new two years ago for 105,000 cedis cash, travelling to Accra to make this purchase. He uses the bicycle to transport game to the village and to the roadside for sale. He loans it out regularly, almost every day, without charge to his (male) friends, but never to his wife. When it breaks down he makes simple repairs himself, but otherwise must take it to the nearest mechanic, located at Apam Junction. He has recently seen a three-wheeler tricycle on television and has an ambition to purchase one.

#### **V The needs and difficulties of women traders**

When talking with women traders in the four study villages and elsewhere in Gomoa district about their difficulties and needs a range of issues emerge, depending partially on the economic status and other specific characteristics of the women concerned. A frequent immediate response from both richer and poorer women, however, is to talk about lack of capital for expanding trading activity, including lack of money for transport fares (in the case of poorer women with reference to visiting local markets, in the case of richer women with reference to visiting larger, more distant markets). Although women are the principal produce marketers, they are usually less able to afford transport than their husbands, who generally have larger areas of land to farm. Husbands are reportedly supposed to give their wives transport money when the wife is selling on their behalf, but do not always do so. Consequently, many poorer women make long journeys to market on foot with heavy loads. Others travel with their loads by tro-tro, then pay the driver when the goods are sold. In addition to transport from village to market, many women also observed the problems of farm to village transport, particularly in Adabra, where all the maize stores are located at the farms, and at Lome, where there are many temporary farm settlements with associated maize stores.

Defaulting creditors and long delays in repayment of credit are a second common problem for traders which affects those with both small and large businesses and both roadside and off-road residents alike but is not specifically transport related. Within the village area, small-scale trading frequently involves extension of credit with attendant dangers for those who give it. In off-road villages, where poverty tends to be above the regional average, credit transactions are extensive and complex. This can be illustrated by reference to the case of three elderly women cooked food sellers in Abora. The women are all very poor themselves, but have to sell their kenkey - which they retail at 200 cedis per ball - on credit to other women in the village. (About two to three balls are needed per person per meal; thus some will buy about six balls at a time or more). Their customers usually have to walk to Apam to sell firewood (possibly partly on credit) before they can afford to pay and sometimes the sellers have to wait a month before they are paid. The kenkey makers are too elderly to farm extensively and, because they do not have money, they obtain much of their raw material - corn - from other farmers on credit. They are also too old to collect firewood themselves, so similarly obtain this (necessary fuel for kenkey production as well as general household use) on credit. Since they lack sufficient bowls for the preparation of the kenkey and cannot afford more, they borrow additional ones from friends. In circumstances like these long delays in payment or default by a creditor, even though the sums involved are small, can have

extremely serious implications.

Many of the larger-scale women traders resident in off-road areas are also at risk of losing money by default in their activities as bulkers of agricultural produce. They buy from small producer/traders who cannot afford transport to local markets, particularly when they only have a small amount of produce to sell. In the local market places they sell the produce on to larger dealers, many of whom come from the major cities. These transactions often involve regular 'customers' to whom some credit may be extended (though usually part of the payment for goods is made in cash). Sometimes, defaults involving large sums of money occur, with little chance of redress.

One problem which stems directly from residence off-road in settlements with poor transport is that associated with drivers arriving late on market day to pick up the traders and their goods. Many women in off-road study villages complained about loss of sales occasioned by such delays: the market may be already well advanced by the time they arrive, and it may not be possible to sell all the produce they have brought before the customers disperse (the latter having already purchased from more punctual traders who have arrived at the market earlier in the morning). Failure of transport to arrive at all is particularly common in the wet season, when drivers are unwilling to venture along difficult stretches of road. Women complained about occasional losses of produce from this cause, and identified deterioration of fresh cassava when a vehicle fails to arrive as a particular problem, since this crop is very heavy and thus difficult to headload over long distances. (They generally organise a vehicle before uprooting the cassava). Cassava once harvested will turn brown and spoil after about four days: in such circumstances it has to be processed into gari. However, not all women are skilled in gari production (which also requires a substantial amount of firewood). [In Adabra, where much cassava is produced, every woman in the village made gari, but in Sampa only about six women are specialist gari processors]. Other losses have included tomatoes, which are normally marketed within two (and preferably one) day(s) of picking, and will certainly rot after four days if already soft when picked. At Sampa, sugar cane evacuation has also been difficult at times resulting in losses due to deterioration in crop quality. A (male) farmer here told the story of how he harvested his cane on Sunday and Monday, having arranged for a driver to collect it on Tuesday to take it to Kyiren Nkwanta market that day. The driver failed to turn up so he went to the junction to find a car but all the drivers there had customers. He managed to sell a little in Sampa, but since no one in Sampa makes *akpeteshie* (local gin), sales were few. By Friday the cane had started to go brown: he managed to sell the remainder at this point, but at a much lower price than he would have received for the fresh cane. Losses of this type are apparently of fairly frequent occurrence in the village.

From the foregoing review it is clear that, although not all trader problems are transport related, access to transport figures significantly among the difficulties described by women traders in the off-road villages studied.

## **VI The potential for IMTs for women and the implications for women's trading activities**

An exploration of IMT use was felt to be particularly appropriate for this access study in

Gomoa because of a recently introduced World Bank-financed programme in Ghana. The Village Infrastructure Project, which targets poor farmers and rural communities, is focused on development of basic village-level infrastructure that can be sustained by beneficiaries. Among its four components is a rural transport infrastructure element which includes a pilot programme to develop IMTs 'to increase the efficiency of evacuating produce from farms to villages and onwards to markets'.

IMT use is relatively low in Ghana and, among officials in Accra and Cape Coast, IMTs seem to be somewhat pessimistically perceived as unlikely to be acceptable in the coastal areas (in comparison with northern Ghana). It is said that they are probably unacceptable along the coast for 'cultural' and topographic reasons, and because of the large quantities of goods which have to be transported (Porter 1998). The results of the small study of IMT acceptability among women in the four off-road study villages in Gomoa reported here are, however, more encouraging.

Photographs of five different types of IMT, selected from a set provided by IFRTD, were shown to a group of eight to twelve women of varying age and economic status in each of the four villages. (A similar exercise was conducted with groups of men but is not reported in detail here. The exercise will be repeated in future field work with different groups in order to check these preliminary findings.) The women were asked to comment on each of the pictures, and then to put them in rank order according to their potential value for use in the village by women. The five photographs were selected to illustrate a range of transport options and were shown in varying order: the 'kencart' (a large-mesh container on wheels, shown being pushed by a woman), the tricycle-cart (shown piled high with goods and ridden by a man), the wheelbarrow (shown by itself, laden with what appears to be crop residue), the bicycle (shown with a long flat rear metal carrier and a man, presumably the owner, standing by), and finally a shoulder pole (shown with a heavy load being carried by a man). No pictures were selected to show IMTs involving animal traction since there is little tradition of large-animal husbandry in the coastal zone where tse-tse is prevalent.

The kencart was the most favoured IMT among women in all villages, with the exception of Lome, where the bicycle was ranked first. It was perceived by most women to be a really valuable means of transport for crops from field to village and also onwards to nearby markets. When the groups were asked about potential difficulties in negotiating the cart along village paths, they generally responded that the cart could be parked on the junction with the nearest broad track and would still ease their work considerably. In the two villages which do not have carts currently, it was suggested that the paths could be easily widened to allow passage of the cart, but in one of the villages where there is a small hand cart, Adabra, this was considered less of an option, and in the other village which has two home-made carts, Lome, there were some reservations about access, probably in both cases reflecting past experience with the carts.

The tricycle-cart was generally the popular second choice, especially with older women, and seen as having a good potential, like the kencart, for both farm to village and village to market transport. The wheelbarrow tended to generate less interest and comment than either the kencart or the tricycle-cart. The bicycle, by contrast, attracted considerable debate. Its long

carrier was usually admired, but only in one village (Lome, see below) was the bicycle ranked above the kencart or tricycle. Elsewhere, it was generally ranked fourth, behind the kencart, tricycle and wheelbarrow, by both younger and older women, because of such factors as its perceived restricted load-carrying capacity, the unevenness of farm paths and the need to tie the load on the bicycle as opposed to simply putting it inside the kencart basket. Interestingly, women did not anticipate any opposition from men if they had bicycles to ride, but many (especially older women) were rather uncertain as to whether they would be able to learn to ride them. (It is possible that if women obtained bicycles, for instance through a loan scheme, these would be commandeered by men. Women's ownership would have to be firmly established and a training programme made compulsory so that women were confident about riding bicycles). By contrast with the bicycle, the carrying pole was rejected everywhere. It was immediately and unanimously condemned by women in every village as being obviously uncomfortable, too heavy and a device which would make it impossible to carry a baby on one's back while transporting goods. The details of perceptions of IMTS for each village are provided below.

In **Adabra** the Kencart was the preferred IMT among women, identified as being particularly useful for moving crops from farm to village. On being asked about the feasibility of using the cart along narrow farm paths women said they would load it at the nearest major track or road to the farm, which is the usual practice when people hire the current four-wheel cart. (This cart is often in use every day at harvest time and there is reportedly need for more carts.) Widening paths was not considered a sound option since 'you can't just weed anywhere'(1). The tricycle and wheelbarrow were also seen as farm to village transport, but as less satisfactory than the Kencart for this purpose. The women liked the bicycle which they ranked fourth. They noted the useful size of the carrier and observed that none of the bicycles in their village had this. The shoulder pole was firmly rejected, however, on the grounds that the load would be too heavy for the neck and that if carrying a baby on the back it would be impossible to carry the pole as well. (It was acknowledged that headloading is very damaging to the neck - 'you get neck pains, it even goes to the waist'. Women say they just buy a rub and massage their neck when it is particularly painful.)

In **Sampa** the Kencart was ranked first, the tricycle second and the wheelbarrow third with respect to their usefulness to women. Women liked the Kencart because they could use it for transporting goods both from the farm and to market (which is just over 5 miles away). Women here report that men generally widen the footpaths and undertake general maintenance. They do this at approximately three monthly intervals, so the carts would be able to pass through to most farms and nearby villages. The tricycle-cart was seen as having a potential role particularly for moving goods to market: 'even if she doesn't know how to ride, she can put her goods [in] and find someone to take it'. The wheelbarrow was seen more as a farm to village transporter, though the dealer said that if her car didn't come, she could put her goods in it and take it to the junction herself. Bicycles are, however, considered impractical for journeys to market with produce, particularly cassava because of its weight: 'bicycles cannot carry a heavy load'. The paths to the farms were also considered too rough for bicycle riding, though 'some young ladies might use it to go to the farm, but it is men who could use it more than women'. The middle-aged dealer observed that most women have no idea how to ride a bicycle, though young women might learn and use it for pleasure. She could not see

how anyone would be able to carry a load and ride as well! Another woman trader said, very firmly, that what she needed was a motor, not a bicycle! (This view was expressed strongly by many men). The carrying pole drew shouts of laughter from the women and the observation that 'carrying is better than tying your load to a stick'. They could not imagine any benefits from distribution of the load in this manner and said they would never use anything like it, though they complain of chest, waist and head as well as neck pains from headloading. (The common remedy in this village, they say, is to buy 50 cedis worth of paracetamol, then go and sit down somewhere and chew them. At another village in this area women described how they prepare an enema from herbs collected from the bush and a little pepper and ginger and use this when the pain from headloading is particularly severe.)

In **Lome** the bicycle followed by the Kencart were considered by women to be the most useful machines. The bicycle, they observed, could be used to travel to Swedru if no transport arrived, or to go to the next village or their farms. No one in the village had such a long carrier on their bicycle. They reckoned they could fit the 5 rubbers of maize they usually transport as one headload on the back of the carrier and even a goat or sheep could be tied across it. No objections from men were anticipated to women riding bicycles. It is possible that the views of the group here were somewhat influenced, however, by the Chief's niece who had obviously enjoyed her one experience of cycling tremendously (see p. 9). Women in Lome thought the Kencart would also be suitable for farm to village transport of crops, since their paths are quite wide when they have been weeded (a job undertaken here only by men) and even to take crops to the paved road. However, they pointed out that there is a stream outside the village which has to be crossed to reach many of the more productive farmlands and this would be impossible to negotiate with a cart when in full spate. The tricycle and wheelbarrow were also considered to be potentially useful but the shoulder pole was dismissed as impractical, since maize and cassava if carried by this means would put too much weight on the neck.

At **Abora** the tricycle-cart and kencart were preferred by the group of women interviewed. The tricycle was seen as particularly useful for taking maize to the grinders (in Abora there is no grinding mill in the village so women walk two miles along the road to Apam Junction to grind their maize about two or three times per week). The Kencart was seen to be useful for moving produce from farms to granaries (which are mostly built in the village at Abora) and firewood to Apam along the footpath. When asked about the problems of negotiating narrow footpaths the women said they would widen the path (though it is actually men who generally do footpath weeding here and women who mend the road, according to women). Both tricycle cart and kencart were seen as preferable to a bicycle, because it would not be necessary to tie on the load. Nonetheless, the bicycle carrier was admired and it was observed that the bicycle could be used by children if the women themselves couldn't ride it. However, Patience Sam, the woman cycle owner, appears to be a useful role model: a number of young girls have learnt to ride on her bicycle. She says that when women see her on it they 'admire me and fancy it and at times are surprised; old ladies even encourage me'. The wheelbarrow was less favoured but only the carrying pole, as in the other villages, was disliked. The women said they would fall down if they tried to use it, 'it weighs you down'. Headloading is considered a better option than the pole, though physical neck problems associated with headloading are acknowledged.

## VII The potential for women owned/run motorised and intermediate means of transport

Only one (middle-aged) woman in the study villages has become a transport owner, through dint of careful saving of her earnings from grocery trading. The taxi-car she owns was obtained locally for 3.5 million cedis on a 'work and pay' arrangement and is driven by a friend's son. When she has paid for the taxi in full, her ambition is to sell it and buy a minibus. She knows of no other woman who owns motor transport, but this did not deter her from purchasing her vehicle (which she decided to buy because of her problems reaching market from Abora). This is clearly an exceptional case: most women in Gomoa have little likelihood of ever accumulating sufficient funds on their own to purchase even a cart or bicycle.

Consequently, it is necessary to consider the potential for group ownership of both motor vehicles and IMTs. However, it is important to point out that there is a fairly widespread concern among the women interviewed in all villages that groups would have difficulty in amicably sharing any machines purchased on a group basis. They said that if they hired it out, for instance, they would be suspicious that the money was going to someone else. In the poorer villages, even joint purchase was considered to be beyond women's means. At Adabra, for example, women merely laughed at the idea of joining together to purchase a vehicle. They simply could not envisage ever having sufficient money, even if all the women in the village joined together, to purchase a vehicle. No woman in the village admits to or knows any other woman who has a bank account though they all belong to a women's susu group which starts from January and pays out in December for the Christmas celebrations (women pay in differing amounts and take out according to what they paid in). This is organised by one of the village women. Abora's women felt similarly disadvantaged, despite the examples of their woman taxi-owner and woman cycle owner - both were viewed as remarkably fortunate.

In Sampa, which appears to be a richer settlement, there are no susu groups: women tend to save individually, however, and a few women admitted to having bank accounts. There is a 31st December Women's group (3) in town to which many women belong and thus the concept of joint action is perhaps, to some extent, accepted. Here there might be an opportunity for some of the better-off women to group together and purchase a market vehicle. Alternatively, it is possible that individual women would have sufficient funds to follow the example of Abora's woman taxi owner, and might consider this option if made aware of the success of that enterprise [to be followed up through discussion during future field work].

At Lome, by contrast, there are neither women's groups (except those associated with the churches) nor susu groups. There is no 31st December Women's group in the village. When women were asked whether they had ever thought of clubbing together to purchase a bicycle or other such item, one woman argued that if they come together in this way, perhaps one person would take the machine. However, another woman said that if they all agreed then it should be workable. They had never considered any type of group purchase. Men similarly commented here that group ownership could well lead to conflict when everyone wants to use

the machine at the same time: they thought it would only work if the co-owners were relatives and living together in one house.

This suggests that, in many villages, poverty or lack of experience with group enterprises may inhibit development of women-owned/run motorised transport and IMTs and that substantial ground-work would be necessary to ensure the success of any such arrangement. There is clearly a place for detailed research (to be conducted in a further stage of the Gomoa project) on this issue, with specific reference to questions of trust, and how trust might be built among women in villages where group enterprise has not been attempted. It is important to note that susu groups operate in some villages, and that group-based work parties for communal village tasks and for agricultural work (nnoboa) are still common. It may be possible to explore and develop ways by which such activities can be extended into group transport initiatives.

### **VIII The potential for electronic communications to improve access to market information**

The concept of improving access to market information through electronic communication seems, in principal, another useful approach by which women's marketing activities could be assisted in places where physical access is often difficult. However, preliminary studies in the survey villages are discouraging, at least in the short-term. In the first place, the research conducted in Gomoa to date suggests that women are generally satisfied with the quality of market information they receive. This is obtained from other villagers who have visited the local market on the previous market day. Most women, perhaps surprisingly, tend not to be interested in hearing about prices obtainable in more distant markets. They say they prefer to deal in their own local market, where they are known and perceive themselves less at risk of being cheated (particularly through the use of under-size measures by dealers, and through the extension of credit to defaulting customers who cannot be shamed by exposure to known friends and relatives). Moreover, many women argue that they simply do not have the funds to visit more distant markets.

For those few larger dealers who travel more extensively and would benefit from broader market information, mobile phones are not, as yet, an option because the network coverage extends only to the boundaries of the major cities and there are no telephone lines in Gomoa extending beyond the district headquarters at Apam. Community FM radio appears to offer the most feasible option currently for dissemination of market information and, indeed, reportedly does provide such data in English and Fante, but, it seems, only for major cities such as Accra and Cape Coast. Discussions about radio in the four villages indicate, however, that few women own radios, and those who do rarely have time to listen to them because they work long days on the farm and are unlikely to be at home when the information is broadcast. A resume of discussions focussing round price information are presented for the four villages in turn. At Adabra there are about six radios in use in the village, all owned by men. Many other men (no women) apparently have radios, but they do not have enough money to replace the batteries. Women generally wait to hear the price at Kasoa market before they take their maize: there is usually someone going to Kasoa for some reason or other. They say they would not consider marketing elsewhere, in any case: 'Kasoa is our market place'.



Few women at the richer settlement of Sampa have their own radio. Only the dealer in a group of 15 women interviewed on this question possessed one and she pointed out that as, like most women, she is out from 6 in the morning to 6 at night in the farm she does not have time to listen to see if they give price information. [Another elderly woman in the group remarked that she had heard about prices when passing by someone's radio and advised the dealer to listen]. At Lome some women have radios and thought that their husbands and children might hear the market prices (in English) on the radio; but, like the women at Sampa, they are generally out early at the farm and thus are unlikely to obtain price information by this means. The main way they learn about local market prices is when someone goes to market to sell.

In Abora no women own radios (and only five men). They say the market price information if available is only in English (the Community FM station at Apam which broadcasts in Fante has broken down). This apparently used to provide some information on markets. Given the poor harvest in 1998 the lack of price information is seen as immaterial - they generally go to ask the price at Apam market before taking in their maize.

Perhaps if Community FM stations offered better coverage of local markets and broadcast the price information at night, groups of women might find some incentive to join together to purchase a radio and batteries, and take it in turn to listen, on a rota. This could lead to more ambitious marketing expeditions among better-off women. For the majority of women with little money to pay transport costs, however, such expeditions are unlikely to be an option unless coupled with concerted group action to improve transport availability in the village and reduce its costs to women.

## **IX Conclusion**

This paper has reviewed a range of access-related issues in coastal Ghana with particular reference to their impact on women. Women have the principal responsibility for marketing in this region and were generally keen to discuss their trading and transport problems in the four off-road settlements selected for detailed research. It is clear from these studies that access to motorised transport services from and to off-road villages is often extremely restricted and more costly than comparable journeys along paved roads. Traders are regularly disappointed by the late or non-arrival of vehicles on market day, particularly in the wet season when roads become impassable, and may lose money as a result of their late arrival at market or deterioration of crops (notably cassava) when they are unable to reach market.

IMTs are currently remarkably rare in rural Gomoa and almost wholly male-owned and operated. The more widespread use of IMTs could assist off-road women in moving crops from farm to village and onwards to local markets, and the majority of women were extremely interested in the photographs of IMTs provided for discussion, particularly the hand cart. However, most women could see little opportunity for obtaining such equipment themselves, because of their slender means. They were mostly negative about the concept of group purchase when this was mooted.

The World Bank's recently introduced village infrastructure project (VIP) may offer the possibility for IMT acquisition, in addition to assistance for the improvement of village tracks and trails. Since the project is envisaged as a means of providing investment to user groups, it is important that women in the villages begin to consider ways by which they can come together, equitably, to take advantage of this potential source of finance. Hopefully, the discussions generated by this research will have made some contribution to that process (4).

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### Notes

1. Farm paths at Adabra are weeded by the people who live or farm along the route. There was some disagreement between women and men as to who did the weeding: according to men they do it all themselves, 'there's (women) is just to walk on it', but women strongly denied this, saying that they weed the paths to their farms with their husbands.
2. At Lome path (unlike road) maintenance, according to women, is purely a mans job. Women at Lome appear to suffer particularly frequently from pain associated with headloading probably because of their daily long-distance treks (around 3 or more miles) from the temporary settlements with heavy loads of produce at harvest time. They carry on average 5 rubbers of maize plus chaff. By the time they get home they have pains in the neck, chest, waist and ankles, even their hands.
3. The 31st December women's group is, officially, an NGO, but its president is the wife of President Rawlings, Ghana's head of state, and it is widely perceived in Ghana as an extension of government.
4. The results of this research have been discussed with VIP coordinators at the Ministry of Food and Agriculture, who are members of the off-road project's consultative group.

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## Photographs

1. One of the women's discussion groups
2. Debating the IMT photographs
3. Home-made carts at Lome