



The becak and (left) a heliocak, one of its motorized competitors.

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INTERNATIONAL DEVELOPMENT RESEARCH CENTRE
Box 8500, Ottawa, Canada, K1G 3H9 • Telephone (613) 996-2321
• Cable: RECENTRE • Telex: 053-3753

FEATURE

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RESEARCHERS TAKE A NEW LOOK AT ASIA'S TRADITIONAL TRANSPORTATION

by MICHELLE HIBLER

"Becak, becak". The cry follows potential customers down the streets of most Indonesian cities, reaching a high pitch in the market place where dozens of the small three-wheeled vehicles line the curb. Brightly painted, bell-festooned, the muscle-powered becaks have for many years been the main mode of transportation for many of the cities' inhabitants and their goods.

But Indonesian cities, like most urban centres in Asia, are undergoing the throes of rapid modernization. Where once the becak was adequate, the rapid pace of modern cities requires a faster means of getting about. Slow and cumbersome, becaks are frequently blamed for accidents and traffic congestion. The longer distances they must travel in the expanding cities also means increased fares, compelling customers to favour communal motorized transportation such as the bemo or heliocak. The ensuing stiffer competition for fares often leads drivers to ignore or violate traffic regulations.

The problems are much the same in other Asian cities where thousands of small-engine vehicles ply the busy streets. Their main advantages are cheap fares, low-energy requirements and labour-intensive applications. In Metro Manila, for instance, an estimated 18,000 jeepneys--remodelled jeeps that can hold from 8 to 12 people--carry commuters through the city. In Istanbul, Turkey, 3000 minibuses and 16,000 dolmus--generally a 1950s vintage automobile that carries passengers on regular routes--are on the road continuously. The Thai samlor is similar to the Indonesian becak while the silor is based on a small Japanese truck, adapted to carry up to 12 passengers.

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Moving to lessen some of the inconveniences these vehicles cause, municipal authorities have adopted several policies. In Jakarta, for example, becaks are banned from the city centre and main thoroughfares, at considerable cost to the 200,000 or so drivers. In Istanbul, the number of plates issued to dolmus and minibuses have been restricted. Coupled with an insufficient number of buses -- 800 to transport the city's four million people -- this has resulted in an increase in private cars, severely straining an already inadequate road system.

In an attempt to help policy-makers gain a better understanding of these vehicles' function, both as a transportation system and as a means of employment, researchers in Indonesia, Thailand, the Philippines and Turkey launched a multi-city study of low-cost transportation systems. Begun in late 1975 with funding from Canada's International Development Research Centre, the study focusses on the drivers, owners and passengers of these various vehicles as well as municipal authorities responsible for their management and looks at the overall transportation facilities and traffic flow in the cities concerned.

Preliminary findings of the research team from Gadjah Mada University and the Bandung Institute of Technology in Indonesia enable a generalized picture of the becak driver to be drawn. Aged between 20 and 50, his daily life is one of back-breaking toil under the almost constantly oppressive heat. Twelve hours of pedalling earn him, on the average, from 450 to 900 Rupiah (\$1.10 to \$2.25) barely enough to meet expenses. Armed with a primary education, he came to the city from surrounding villages some 10 years ago. Lacking definite skills, he turned to becak driving, renting the vehicle for 250 to 350 Rupiah per day.

Although only Jakarta has implemented policies to restrict the becaks' movement, their role appears to be diminishing in Indonesia's smaller cities as well. The study in fact shows an increasing use of motorized transportation which is faster and, over longer distances, cheaper than the becak.

If technology is phasing out the becak in Indonesia, a different situation exists in the Philippines and in Turkey where the "traditional" vehicles are an important part of the cities' transportation systems.

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In Istanbul, the dolmus and minibuses carry almost half the city's close to three million daily passengers using public transportation. Officials have recently proposed lifting the plate restriction as a means to increase their numbers, a proposal that has met with strong opposition on the part of the Drivers' Federation to which 65 percent of the dolmus drivers belong. As the research team from the Technical University of Istanbul and the Greater Istanbul Electricity and Public Transportation Authority point out, while debates continue on ways of improving the traffic flow in the city, the dolmus and minibuses continue to operate with a deteriorating level of service. The dolmus, for instance, finds it more profitable to act as a private or communal taxi-cab. Minibuses, which ply regular routes, are carrying twice as many passengers as they are legally capable of.

For the drivers, the situation is profitable. The survey shows that 75 percent of the drivers own their vehicles and, on the average, earn close to \$215.00 a month, a lower-middle income range.

As is the case in Istanbul, Metro Manila's growth has far outstripped the transportation system. The jeepneys have played a considerable role in alleviating deficiencies in bus and rail services but problems have grown as well. The Manila Police Department estimates that three-quarters of all accidents involve jeepneys, often as a result of bad driving and competition for fares. The researchers from the City University of Manila, describe the situation as one of near anarchy: scheduling of routes is almost non-existent, trip cutting to maximize profits is rampant and attempts at regulation and registration have been minimally successful.

The high competition has also meant that Manila's drivers are not as well off as their Turkish counterparts. Although they carry 37 percent of the city's passengers, the study shows that less than 10 percent of those interviewed considered driving to be their main occupation, perhaps not surprising since their earnings, after expenses, averaged at about \$3.50 for a 12 hour shift. And, while many drivers have other jobs, close to 40 percent reported that they had no main occupation.

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In Chiang Mai, Thailand's second largest city, low-cost transportation systems combine both traditional and more modern vehicles. The samlors or pedicabs, however, are disappearing here as in Indonesia because of their low speeds, limited passenger space and low returns for the drivers. As the researchers from Chiang Mai University point out, their registration is no longer strictly enforced and registration checks are flexible. They estimate that 1500 to 2000 samlors still operate in the city, mainly carrying short distance passengers.

As the number of samlors decreases, their drivers often turn to driving the increasing number of silors. Actual numbers of silors are difficult to determine since only those carrying goods are registered and no law has been implemented to legalize their status. The researchers estimate that close to 4000 silors carry goods and people within the city, many of them commuting from neighbouring provinces and operating illegally within the city.

When these studies are completed later this year, they should provide municipal planners and authorities with reliable data on the vehicles and their role in the overall transportation systems. By providing a socio-economic profile of the drivers and passengers, identifying the problems encountered and recommending alternative strategies for improving working conditions and transportation systems, they should assist authorities in their efforts to manage and integrate the vehicles in the cities transportation systems in a way that is acceptable to the drivers, the owners and the passengers.

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