

THE International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR,B) in collaboration with the United States National Institutes of Health and Child Health and Development is sponsoring a two-week workshop (July 12-16/July 19-23) at ICDDR,B. The primary objective of this workshop is to introduce and help disseminate to policy makers and researchers in Bangladesh, the Matlab Health and Socio-economic Survey, a unique, comprehensive data resource on various aspects of human welfare and development in rural Bangladesh.

# Disseminating a Unique Development-related Data Resource

by Dr Omar Rahman

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Human development represents a complex interaction between various aspects of human experience including health, fertility, migration, income, education and social networks. Moreover this process involves multiple players at the individual, family and community level. Our desire to understand the multi-dimensional aspects of human well-being have been constrained by the fact that by and large surveys in developing countries tend to focus on a single topic, a single sub-group of the population, and a single level of analysis.

For example, we routinely conduct surveys about mortality in children or mothers, employment for adults, fertility amongst women aged 15-44, household consumption, community facilities etc., but rarely simultaneously. This type of narrowly-concentrated information makes it very difficult to understand the complex linkages between different types of decisions in different areas that individuals and families make to affect their welfare, and the community and societal factors that constrain these decisions.

The Matlab Health and Socio-Economic Survey (MHSS) represents a new, sophisticated type of comprehensive survey designed to explore and analyze the factors that determine how individuals, families and communities interact in a rural developing society to affect human well-being.

The MHSS is a multi-institution collaboration that includes scientists from a variety of disciplines (including medicine, epidemiology, demography, sociology, economics and anthropology), both in the United States and in Bangladesh. It is primarily funded by the National Institute of Health and the National Institute of Child Health and Development in the United States, with supplementary funding provided by the Mellon and Fogarty Foundations.

The principal investigator of the project is Dr Omar Rahman, Assistant Professor of Epidemiology and Demography at Harvard University. The other co-investigators include Dr Jane Menken of the University of Colorado, Dr Andrew Foster of Brown University, Dr Jeroen Van Ginneken and Nizam Khan of the International Centre for Diarrhoeal Disease, Research, Bangladesh, and Shahidul Islam and SN Mitra of Mitra and associates.

Unlike other surveys which typically focus on a single topic and a single age group, the MHSS has collected detailed information on multiple topics, including health, fertility, education, marriage, migration, economic status (assets, transfers, credit), and characteristics of family and social networks. It is thus one of the most extensive and comprehensive surveys ever carried out in a developing country context. The information collected comes from about 7,000 households, and approximately 38,000 individuals ranging in age from infants to the elderly in the Matlab surveillance area under the supervision of

ICDDR,B. In addition to household and individual level information, extensive community level data on community infrastructure, services, wage rates, and quality of schools, health providers and family planning providers have also been collected.

The MHSS was specifically designed to explore in depth a range of issues about human well-being in developing countries, which was hitherto not possible prior to the collection of this information. These issues include the following:

i) What are the determinants of morbidity status amongst children, adults and the elderly in rural Bangladesh? Specifically what is the impact of gender, family structure, income and education on the health of different types of individuals?

One of the most intriguing preliminary findings from the MHSS is that women in rural Bangladesh at all ages have significantly worse health status than men. This finding is consistent with data from developed countries which also show a modest female disadvantage, but is the first large scale demonstration of a developing country context of what may turn out to be a relatively universal female health disadvantage. Many issues remain to be explored.

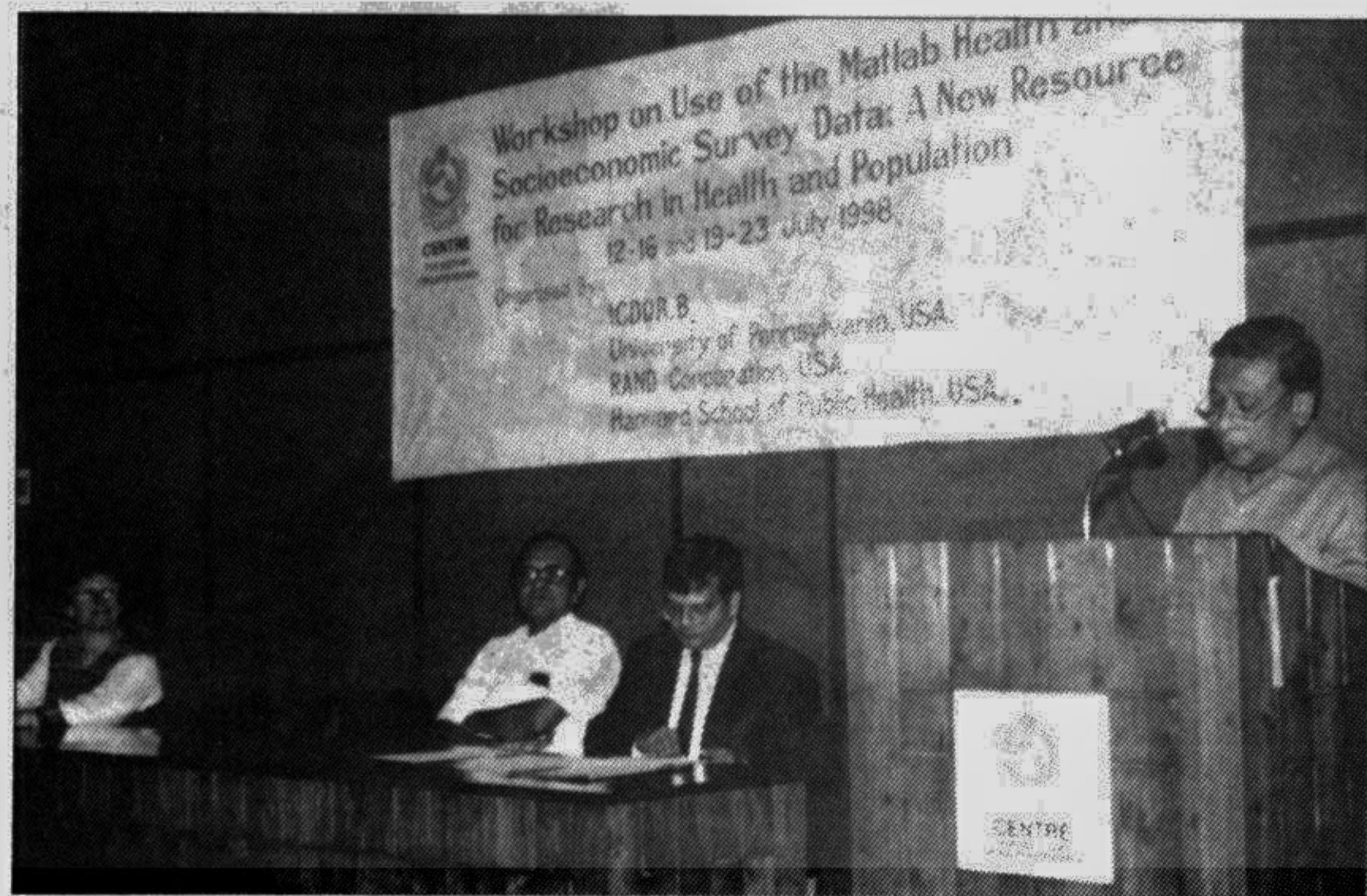
For example are educated, richer women or women in small families less likely to have a big health disadvantage, or is this 'health status discrimination' pervasive across socio-economic status? Fortunately the MHSS provides us the means to explore these issues in depth in a way that no

other data set can.

ii) Another critical issue in the realm of health sector planning is understanding the factors that affect health care services use? We need to understand who gets access to health services and who does not. For example the female disadvantage in health status noted above might be a reflection of the fact that in rural Bangladesh girls and women are much less likely to have access to health services relative to boys and men.

Preliminary findings from the MHSS suggest that the major difference may in fact be in the type of health provider seen by females rather than the overall level of access. Thus while men and women may apparently have similar levels of utilization of health services (defined broadly) women may be disproportionately being seen by less qualified traditional practitioners. Here again the MHSS will allow us to explore this issue in depth.

In the same vein, it is important for us to explore the impact of time and money costs in determining health provider choice? Exploratory findings from the MHSS show that significant numbers of rural Bangladeshis choose to go to so-called private practitioners for a fee, despite the existence of nominally free health complexes. A big factor explaining this decision seems to be the long waiting times associated with being seen at the Thana Health Complex. For the poorest, because of the inflexibility of their schedules, 'time is money' and they are willing to pay a not-insignificant



amount to be seen quickly. iii) What is the impact of family planning services on the health of mothers and children?

Although long held to be a truism, there is actually relatively little empirical evidence for this assertion. The MHSS will allow us to test this proposition and estimate the magnitude of this effect and the potential gender difference in this impact.

iv) What are the long-term, cumulative effects of increased numbers and frequency of pregnancy on women's health over the life cycle? Although there is a fair amount of evidence that multi-

ple pregnancies pose a risk in the short term to the health of the mother, the long-term impact is far from clear. Older women with lots of surviving children appear to be in better health than those with fewer children. Thus old-age security concerns need to be weighed against shorter-term morbidity concerns.

v) What is the impact of reduced family size on educational investments in children? The MHSS provides us the means to test if reduced size results in greater educational investments in children as demographic theory suggests. One interesting issue is whether

these gains are the same for boys and girls.

vi) What are the determinants of educational attainment?

What is the impact of education on both own and child health? Although there has been quite a lot of evidence linking improvements in mother's education with declines in infant mortality, little evidence exists for the linkages between parental education and child morbidity and adult education and adult morbidity and mortality. The MHSS will allow us to explore this important issue.

vii) Who has access to credit? How important is the availability of credit for im-

proving the welfare of individuals?

The detailed information in the MHSS will allow us to investigate the impact of improved access to credit on both own and child welfare using a number of different outcome measures such as health status, income, educational attainment, fertility etc.

viii) What are the primary determinants of rural urban migration?

What is the impact of migration on the health of children, adults and the elderly? In the last two decades there has been a very rapid increase in urbanization in Bangladesh, however little detailed information exists on the determinants and impact of this process. This new data will allow us to explore in depth these issues.

The above represent just a very small subset of development-related issues with important implications for public policy that can be explored using the MHSS. It is worth noting that all of the information collected by the MHSS will be available in a computer file free of charge to researchers and policy makers in Bangladesh, starting January 1999. Interested individuals should contact Dr Omar Rahman at the Harvard School of Public Health at the following e-mail address: mrahman@h-sph.harvard.edu.

One of the primary goals of this workshop is to accelerate and expand the involvement of Bangladeshi scientists in analyzing data of importance to Bangladesh. It is an unfortunate paradox that much of what is known about the developing world comes from data analyzed by developed world scientists, and developing country scientists generate relatively few findings about the developing world. This workshop represents a small step in redressing this imbalance.

The author is Assistant Professor of Epidemiology and International Health at Harvard University.

## Out of Sight? Well, Not with a Cellular

Cellular phones are no more a luxury nor a monopoly of the rich in Bangladesh. Even poor and illiterate Bangladeshi women carry the cellphones that earn them money as well as new status in the male-dominated society. Rehana Parveen Ruma explains, why.

**I**T'S Friday. The weekend. Off from school the children are playing hide-and-seek in the mud compound of the house. Their mother Laili Begum is busy talking to visitors. As she hands a floral glass of cold drinks to one of the visitors one of her neighbours come to make a phone call to his son in Dhaka, the capital city.

Laili excuses herself from the visitors, and ran back into her low-ceiling thatch-and-tin-roof house. In minutes she makes the connection to Dhaka from her mobile pay phone and calls the neighbour to speak to his son. Happy after the three-minute conversation with his son the man hands Laili Tk.15 — five taka for each minute.

Laili counts the soiled notes and tugs them carefully into a wooden box. She wears a smile when she returns to her visitors from Dhaka city.

"We have always been poor. But things have started looking better since I bought this mobile pay phone with money borrowed from the Grameen Bank," says Laili.

Grameen Bank, a non-traditional banking institution that provides small loans mostly to the poor women in villages, has introduced mobile pay phone for its borrowers.

The Grameen members — usually those who have good record of repayment — buy the phones with money it loans to them. For each outgoing call the owner of the phone charges Tk.5 — Tk.2.60 is payable to the Grameen Bank. The repayment is made at Tk.160 per week if it is paid for a three-year period. However, a borrower can decide the period of loan repayment. A cell pay phone costs Tk 18,100, an amount the Grameen Phone loans to the buyer.

Though her Patira village is just outside the north-eastern outskirts of Dhaka, Laili, hardly educated, has never seen a telephone until she bought the Grameen pay phone last year. She has been a member of Grameen Bank for several

years, the loans she uses to run a chicken farm. She was surprised when one day Grameen Bank officials offered her a mobile phone that she can operate to earn more money.

"I was so surprised that I could hardly trust my own ears. They said that the phone will have no wires. How can there be telephones without wires?" says Laili remembering the day she first heard about mobile phone.

Today, she is no more nervous about mobile phones. She keeps her phone mostly at home from where villagers make their calls. But there are occasions she carries the phone to the callers.

"Sometimes there are people who are too old to walk to my house. So, I carry the phone to them," she says.

In Bangladesh the rich and the poor may have one thing in common: they own cell phones. But while most companies target only the rich people living in the cities Grameen Bank thought of the poor people. It quickly set its phone unit named Grameen Phone that reaches cell phones not only to the city people but also the rural poor.

Since its launching on March 26, 1997 Grameen Phone has reached 100 pay phones as many as villages. Prof. Muhammad Yunus, the founder of Grameen Bank, thinks it is possible to cover each of Bangladesh's more than 68,000 villages with mobile pay phones. The immediate target for next two years is to reach the phones to at least 40,000 villages.

"This will be a revolutionary development. I want to prove that phones are not monopoly of the rich. Even the rural poor can use it," says Prof. Yunus in an interview.

Yes, Yunus is right. The rural people are using mobile phone. Patira is not far from Dhaka city. But it has poor road link with the capital and the village

gets cut off during the monsoon when villagers need to use boat to come to the city.

Grameen Phone is one of the country's four private companies which have

licenses to sell cellphones. The introduction of cellphones has greatly eased the pressure on the state-run telephone organisation, T&T. It has reached telephonically big (and analogue) to more than 500,000 subscribers since Bangladesh's independence from Pakistan in 1971. Though there has been a dramatic increase in the number of telephones in Bangladesh, the T&T is unable to satisfy another 100,000 people who have applied for telephones. Those who can afford are opting for the cellphones, which cost less than Tk.15,000 in connection cost.

But the Grameen Phone has taken the cell phones beyond the cities.

Morsheda Begum, another poor housewife at Isapur village near Dhaka, now owns and operates a Grameen pay phone. She keeps the phone at her husband's grocery store to make the use more comfortable to the villagers who can also make long-distance international calls.

"There are many who also receives calls from relatives working in Japan, South Korea or other countries," says Morsheda.

Morsheda is meticulous about her new business. She keeps a registrar in which she enters the names of the callers and the duration of the call. For international calls she keeps a call rate chart provided by the Grameen Phone. She has a list of country code numbers.

"In many cases the villagers don't make the long-distance calls from here. Through letters they set a time when their relatives call from outside. They wait at my end to receive the calls. I feel good when I see a wife speaking to her husband using my phone," Morsheda says.

Sometimes the long wait becomes useless. Because of technical problems there are calls that don't get through. This is one of the few problems the pay phone operators face.

"While on her death bed my mother wanted to talk to my brother abroad. But she could not because on that the pay phone was not working for a long time," complains Atiqullah of Patira village.

Another problem is frequent disruption in the lines which get cut off while the callers are carrying out their conversation. Many don't want to pay in such situation.

"It's true that lines can get disconnected because of technical fault. But the charge for the disconnected conversation will depend on the operator," says H.M. Sharifuddin.

According to him the rural pay phones have more facilities than the mobile phones used in the urban areas. There are guarantees and maintenance facilities. Some rules have to be observed. A village pay phone operator cannot transfer it to anyone living in the cities. Though the operator can move with her pay phone, it has to be kept at her home for a specified period so callers visiting her home get the facilities. Women are trained to use the phones.

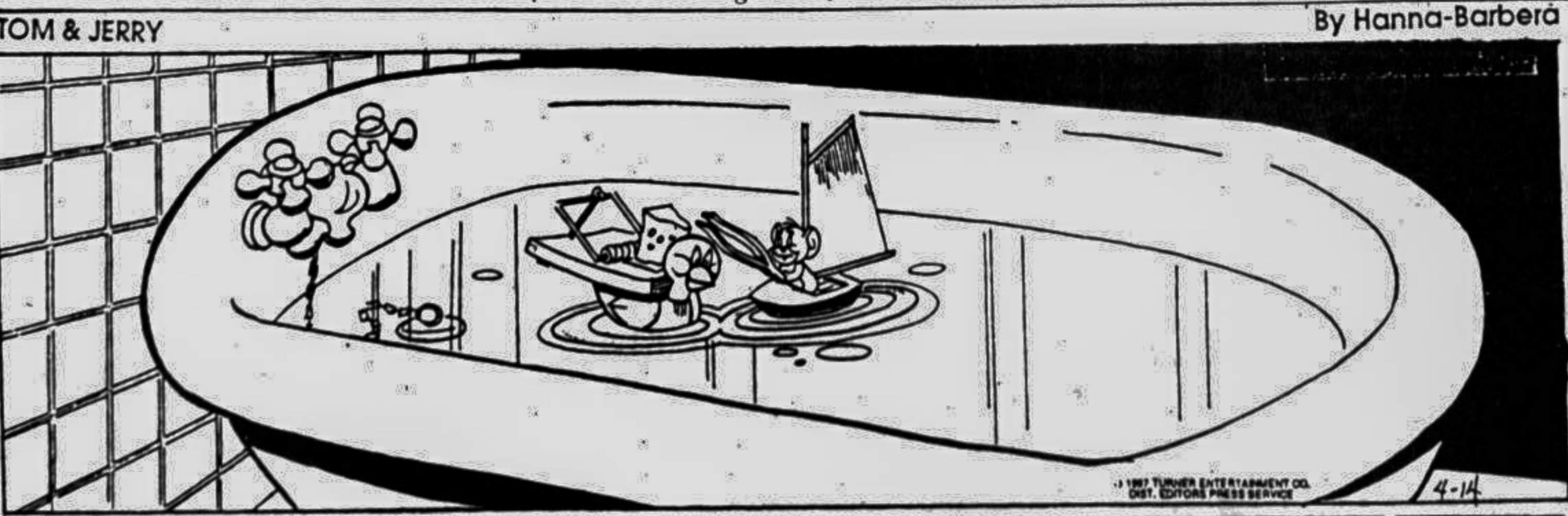
The village pay phone is bridging the gap between rural and urban areas. It's helping the villagers get fair prices for their products. One can now phone a contact in the cities to know, for example, the prices of eggs or milk.

The phones have earned popularity and respect for the poor women operators.

"I'm now more known in our area. People respect me more. My husband is happy and children love my job," says Laili as she attends to another villager who wants to speak to his son working at a construction company in Saudi Arabia.

— News Network Feature

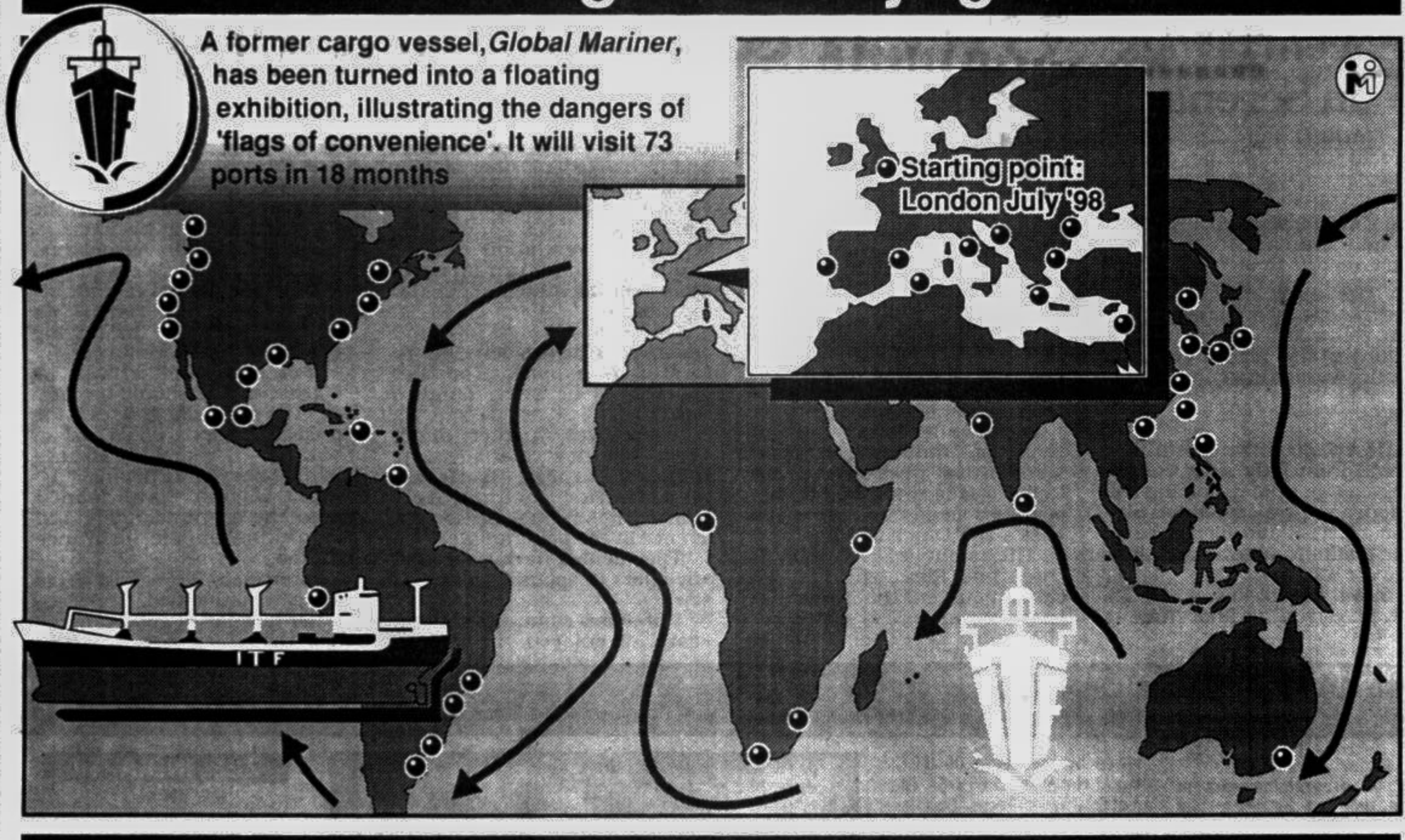
By Hanna-Barbera



## Ship of Shame Sets Sail to Curb Suffering at Sea

The Global Mariner is on an 18-month round-the-world cruise that will take in 73 ports. The aim, reports Gemini News Service, is not a holiday for its sponsors, the International Transport Workers' Federation, but an education drive to inform the world of the widespread menace of hazardous working conditions. Dan Palmer writes from London.

### The Mariner's global voyage



Seaman shows his truncated arm, severed by a faulty ship's hatch.

Another works shoeless in the engine room, his bare feet covered in oil and grease.

A third looks tired and emaciated. He has not been paid for five months.

The photographs form part of an ocean-going exhibition designed to gather support for a long-running international campaign against bad working conditions at sea.

The main target of the campaign are flags of convenience (FOCs).

Instead of registering ships with their own national authorities, many owners fly the flag of governments whose only interest is the collection of registration fees. Typically, such countries charge little or nothing in taxes, have a poor record in maintaining decent standards of safety, training and working conditions aboard ship, and impose no restrictions on crew nationality — giving owners a free hand.

"We believe that the FOC system is evil," says David Cockcroft, general secretary of the International Transport Workers' Federation (ITF), which represents more than five million workers in every branch of transport.

The biggest FOC register is Panama, whose combined fleet has grown since 1980 from 24 million gross tons to a current figure of 82 million gross tons. The ITF points out that even landlocked countries such as Bolivia have become flag states.

This year is the 50th anniversary of the federation's lunch of its campaign against

flags of convenience, but Cockcroft emphasises that celebrations are not in order — "because we have a lot of work to do".

It is the owners' desire to maximise profits at the expense of safety and working conditions that causes the problem, says ITF. Owners deny this, saying it makes simple commercial sense to register where it is cheapest.

To take its message around the world, the federation has turned a former cargo ship, the Global Mariner, into an exhibition and sent it on an 18-month, 73-port voyage, setting off from London in July.

It will visit ports in every continent, including New York, Buenos Aires, Cape Town, Sydney and Hong Kong, before returning to London in 2000.

The only FOC port in the itinerary is in Malta, where the ITF is expecting a warm welcome since the country has been trying to improve its shipping standards.

Inside the hold, the expected 150,000 visitors will see displays highlighting poor conditions on FOC ships. Sound-effects of grating steel and rushing water add to the atmosphere.

People will be able to view a film about shipping disasters, such as the one earlier this year when the Cyprus-flagged bulk carrier Flare broke in half in the Gulf of St Lawrence with the loss of 21 lives.

Visitors to the exhibition will also be able to play a computer game, in which they become a worker on a FOC ship, while children can watch a cartoon about Al Ross, a seagull who investigates FOCs for the

ITF.

The idea is to educate the public about FOCs in the hope that they will contribute to pressure on their governments, who may have ignored merchant seamen's rights because it is rarely an election issue.

"No politician will ever lose his seat by not dealing with problems of seafarers," says Cockcroft.

The federation backs up its case with statistics showing that workers are twice as likely to have fatal accidents on FOC vessels. Studies show an average in recent years of more than 2,200 deaths per year, of which 1,102 are the result of maritime disasters. 521 are from illness, 419 from occupational accidents, 91 are homicides or suicides, and 74 are sailors missing at sea.

As part of its campaign, the federation has also released a report: *The ITF Top 20 Worst Shipping Companies in the World*.

It names the shippers the ITF considers to be the worst offenders in terms of working conditions, as well as the classification companies which determined whether their vessels were seaworthy; their protection and indemnity (P&I) clubs, (associations formed by shipowners who contribute funds which can be used to protect a member from large third-party financial loss such as an oil spill); and the FOCs under which they trade.

The report contains a brief list of complaints against each shipping company, such as carrying insufficient provisions for a voyage, unfair dismissals and even cases in which crews

have been locked on board without food or water for complaining.

"These are] who some of the real bastards are, and they're not going away," says Cockcroft.

Lloyd's Register, one of the biggest classification companies, representing 20 per cent of the world's shipping fleet, is mentioned several times in the report, but says it has no responsibility for the treatment of crews, and is responsible only for a ship's structural soundness. Nevertheless, spokesman Barry Lester said: "If these allegations are true, they're of great concern to us."

The ITF says it is naming names because it wants to make everyone in the industry more responsible. But its efforts may have been hampered by inadequate research.

At least one P&I club denies any link with one of the shipping companies on the "top 20" list.

Meanwhile, some of those named and shamed have threatened to sue.

Mark Dickinson, the federation's assistant general secretary, says: "If some of [the ITF report] is wrong, I'll apologise."

But he points out: "It's notoriously difficult to find out anything about shipping companies and their business dealings and commercial contracts — even more so when it involves FOCs."

— Gemini News

The writer is a Canadian journalist working with Gemini News Service in London on a fellowship arrangement with the School of Journalism and Communications at the University of Regina.