EVER before have so population. Yet there are many uncertainties, too, for the

Take zero population growth. It is widely accepted among demographers that in order to reach a global zero growth rate, couples would have to have only enough chil-dren to replace themselves roughly two children per cou-

The only major developing region that approaches this replacement level is Eastern Asia, which has a fertility rate of slightly over two births per

The rest of the developing world has a longway to go before reaching replacement levels, especially sub-Sahara Africa where live births per woman average more than six

And declining birth rates, demographers are eager to add, don't immediately translate into stable populations. The exceedingly high birth rates of 15 to 35 years ago have created in today's population a disproportionate percentage of women in or nearing their childbearing years.

This "momentum" from past years is now adding newborns at the startling rate of nearly I billion every ten years during the 1990s and the first two decades of the next cen-

Asian and Pacific countries, in general, experienced a decline in annual population growth rate from 2.3 percent in 1970-75 to 1.8 per cent in 1985-90. But according to the United Nations Social and

**EENAGE** pregnancies

are on the rise in New

In 1989, for example, some

5,000 girls aged 13 to 19 had

babies. Official statistics record

that 2,100 teenagers had

abortion in the year previous to

women wait longer before

marrying, about half of

teenagers have had sex by the

time they are aged 16, more

marriages are collapsing and

ond-highest teenage preg-

New Zealand has the sec-

abortion is on the rise.

This is a country where

March 1990.

Association.

pregnancies.

break-ups.

One marriage guidance

counsellor put the cost of all

this to the New Zealand tax-

payer at NZ\$35 million (about

US\$20 million) in welfare

payments, subsidised state

Yet another official survey

has shown that many women

now wait till they are in their

late 20s or early 30s before

marrying. They are also delay-

The average age of first-

21 years in 1970 to 25 years

housing and free legal aid.

ing having families.

## East Asia Leads in Two-child Families

In general, Asian and Pacific countries are seeing a decline in annual population growth rates. But the region's population continues to expand by about 55 million people each year. - by Winthrop C. Carthy.

Economic Commission Asia and the Pacific (ESCAP), the region's population continues to expand by some 55 million people each year.

The region's population as of 1990 represented in increase of about 20 per cent over the 1980 level. It is expected to increase by a further 28 per cent between 1990 and 2005, to reach a total of about 4,000 million people.

"Fertility rates will not decline to replacement level for most countries of the region before 2010," notes ESCAP. "During the 1990s and into the next century, the vast majority of births in the region will continue to occur in those countries that are characterised by widespread absolute poverty, inadequate social infrastructure and comparatively low rates of economic growth.'

In a background paper prepared for the Fourth Asian and Pacific Ministerial Conference on Social Welfare and Social Development, to be held in Manila on October 7-11, ESCAP says that "the region's population size and rate of growth, its changing age com-

position and its shifting ruralurban distribution act as an important influence on many current social development is-

"Mass poverty, widespread unemployment and underemployment, rural landlessness, urban squalor, natural resource depletion, environmental degradation, international indebtedness and political tensions, are among the concerns linked with the region's demographic conditions."

Modern medicine and education have done much in recent years

to help young children survive their vulnerable first five years. But is the pace of improvement, as some demographers fear, slowing down prematurely in the developing world?

Some answers may come from an ambitious nine-year data gathering project scheduled to end in 1993, the Demographic and Health Surveys (DHS). Data collected by DHS in 28 countries between 1986-90 show that during the five-year period preceding the surveys, mortality among children under age five was highest in sub-Saharan Africa (170 deaths per 1,000 live births).

It is considerably lower, for North Africa (100 per 1,000) and lower still for Latin America and three Asian countries - Indonesia, Sri Lanka and Thailand.

The age of the mother can play a role in a child's death. Children born to teenage mothers, especially those under age 18, have a higher risk of mortality than any other children. Data show that children born to teenage mothers raise overall childhood mortality by 5 to 10 per cent.

Birth spacing, the DHS data demonstrate, has been found to be another important factor in a child's chances of survival If born to a mother who has given birth within the prior 18 months, a child from a developing country is, on average, roughly twice as likely to die in the first five years of life as a child born two four years after a preceding birth.

According to the DHS, the rate of the globe's population growth is changing in impor-

tant ways. During a recent 15-year period (1965-70 to 1980-85), the fertility in developing countries declined by almost

The fertility declined by 62 per cent in these less developed Asian countries with a population of 45 million or nore: Bangladesh, China, India, Indonesia, Iran, Pakis-tan, the Philippines, Thailand and Vietnam.

At its current rate of growth, the world's population of 5.4 billion will double in the next 40 years. In the developing world alone (excluding China), it could double in only 30 years, unless the birth rate in less developed countries can be decreased even further.

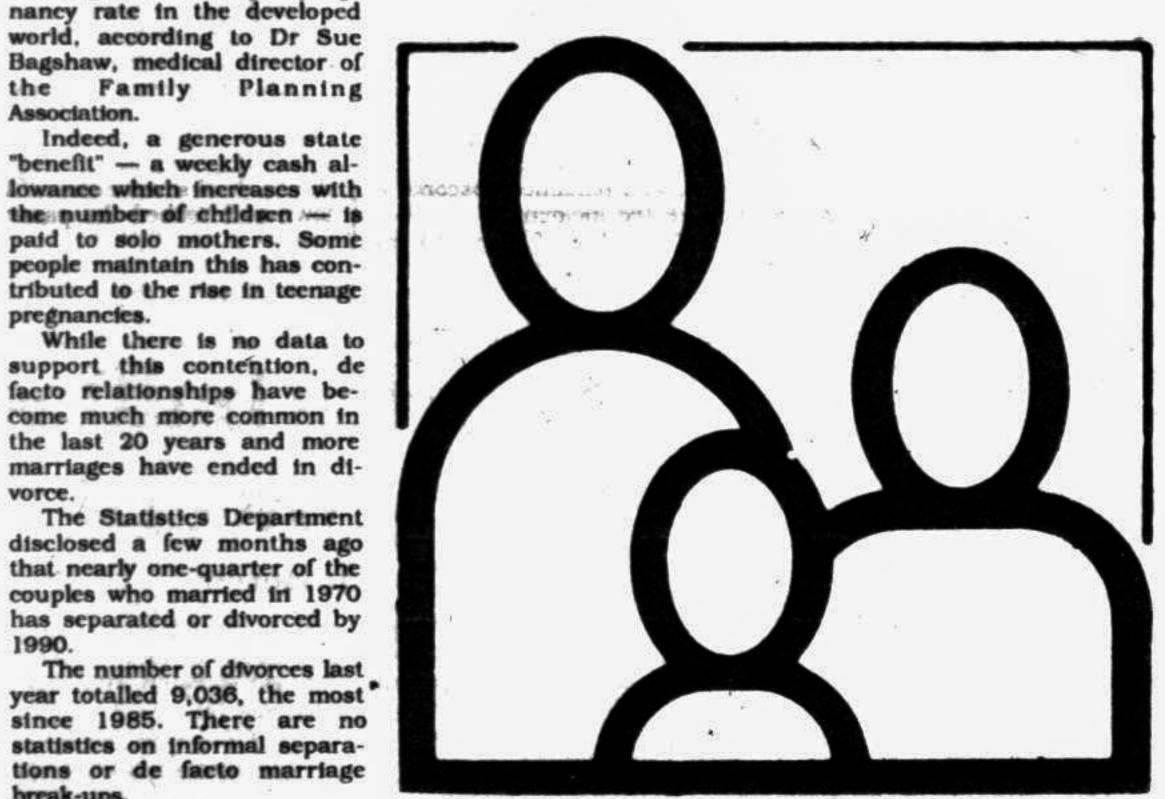
The DHS project is a multimillion-dollar effort to collect population and maternal and child health data worldwide. The project is funded by the US Agency for International Development and implemented by the private Institute

for Resource Development. On completion it will have carried out about 60 surveys in more than 50 less developed countries. The average survey takes two years, interviews between 3,000 and 20,000 women, involves approximately 100 local survey personnel and uses special computers.

DHS data have become standard information for economists, health specialists, environmentalists and government officials. The project's data, for example, provides the first real evidence that fertility is declining in sub-Saharan Africa, specifically in Botswana, Kenya and Zimbabwe. - Depthnews

## Family Structure Changes in Asia

More marriages are collapsing and abortion is on the rise in New Zealand. In Asia are the Pacific, divorce, separation, widowhood and unmarried parenthood, and single-person households are also increasing. by Ian McCrone



more than half the enrolments in previously male-dominated university courses such as law, medicine and veterinary

New Zealand's predicament perhaps reflects the changing structure of the family in Asia and the Pacific where divorce. separation, widowhood and unmarried parenthood, and single-person households are on the rise.

"Governments should increasingly need to consider time brides has gone up from the means through which they can be given effective support today. An estimated 10 per to the family in continuing to cent of New Zealand women now live alone, and provide carry out its traditional functions in the face of the corrosive influence of development," notes the UN Economic and Social Commission for Asia and the Pacific (ESCAP).

In a background paper prepared for the Fourth Astan and Pacific Ministerial Conference on Social Welfare and Social Development, to be held in Manila on October 7-11, ESCAP says that "social security is a continuing concern throughout the region, and an increasing one as social development proceeds to erode traditional safety nets.

"The erosion of family and community, the social dislocation and alienation inherent in urban life, the value transformations attendant upon technological change, the uncertainties imposed by the organised labour market, and other aspects of social development are introducing new elements of insecurity into the lives of the people.

In just a decade, abortions in New Zealand increased by more than 40 per cent. Today, about 10,000 abortions are performed annually.

Technically, there is no such thing as legal abortion "on demand," Pregnant women have still to convince medical counsellors their lives are at some risk. But the recent rise in the abortion rate has inspired picketing of clinics and protests to politicians by the anti-abortion lobby.

Roman Catholic bishops this year started a chastity campaign in church schools to combat the casing of the legal ban on contraceptive information for those under 16.

The bishops called for more effort in "moral instruction" to counter what they considered a defective education policy thought up by politicians in the hope of reducing teenage pregnancies and limiting the spread of sexually-transmitted

discases. The reaction against abortion is strongest in the southern, least-populated provinces, where the rural folk retain

more conservative values.
One Health Department survey of adolescent sexuality found more than half of the youngsters questioned have had sexual experience by the time they reached the "legal" age of 16. One-third took no contraceptive precautions the first time.

Calls for an earlier start on sex education and more freelyavailable contraceptive devices are supported at many levels. An informal survey of the top class at one Roman Catholic college at Whangarei (Northland), last June showed most 17-year-old students thought condoms should be is-

sued free in high schools. At Lower Hutt, near the capital Wellington, senior high school students have opened the country's first family planning clinic for teenagers. -

Depthnews

MANILA: 'Our ultimate goal is not theatre," says K V Subbanna, himself a theatre man, playwright, poet, writer and farmer.

'Our aim is to use whatever medium is available to us," he says. Theatre, poetry, cinema, literature, the arts - these he calls "languages, which help man understand man."

"Theatre is particularly useful here as it is a visual medium of communication and also it draws elements from all other media", he says.

K V Subbanna, 59, is this year's recipient of the prestigious Ramon Magsaysay Award for Journalism, Literature and Creative Communication Arts for 1991.

A pepper farmer, K V Subbanna is also the man behind the Ninasam Theatre Institute which has brought film classics and theatre -Indian and Western, modern and traditional - to his townmates in Heggodu, a small village in Karnataka, south India. Heggodu is a small town of 500 people. But it has an 800-seat theatre, a unique achievement in rural India.

served. Passengers still walk across the tarmac to board and boiled sweets are distributed before take-off. In the outer islands many airfields are grassy strips where goats and cows must be chased off before landings. Some terminals are thatched or wooden huts containing a single table.

State-owned IPTN is used to foreign contracts. It makes two turboprops under licence from CASA of Spain. A helicopter is made for Germany's Messerschmitt. Aerospatiale of France licenses IPTN to produce two its Puma helicopters and the USA's Bell Helicopters licenses the company to make one of its machines.

In the company's 15 years it has delivered 291 aeroplanes and helicopters. Domestic customers accounted for 244 of these and foreign customers bought the rest. Contracts for a further 126 have been signed and 60 others are being negotiated.

Another thriving part of the business is making parts for jetliners and fighters. The company has a contract with Bocing to make parts for 767 and 737 jcts. It has also made components for F-16 fighters since 1988. Last year it signed an agreement with Fokker of the Netherlands to make F-100 parts.

IPTN's latest partnership is with British Aerospace. In June 1991 the two agreed to collaborate on production of the Hawk military aircrast. British Aerospace began a sponsorship scheme last year for Indonesians to study a British universities.

IPTN makes some military hardware, including a Messerschmitt helicopter gunship torpedoes under license from Germany's Telefunken licence and Belgian air and ground-

Finding a foothold in the fiercely competitive, high The smaller the family, the easier the life. Farmer-Playwright Brings

Urban culture is rarely introduced to the village world, whose inhabitants are thought too unsophisticated to appreciate it. K V Subbanna's work has changed this perception. by Paul Icamina

Theatre to the Villages

The Ninasam was started in 1949 by his father. It has since Akshara supervises a theatre its annual film appreciation grown into the Ninasam Theatre Institute which has brought theatre and films to Karnataka state. Its latest project is to set up five inexpensive theatres across the state.

"By introducing modern plays and films to rural folk in southern India, K V Subbanna is making a powerful case for the universality of art," the Magsaysay Award citation

"In recent years Asia's prosperous urbanites have discovered the rural arts. Handicrafts from villages now adorn their city homes. Meanwhile, polished versions of country dances and plays appear on television and grace official extravaganzas.

"Yet the finer elements of urban culture are rarely introduced to the village world, whose inhabitants are thought too unsophisticated to appreciate them. K V Subbanna's work has changed this perception."

K V Subbanna trusts his rural audience, noting not much difference between them and the urban crowd. Perhaps, say, 10 per cent of people in New Delhi cannot understand poetry and music," he says. "It is the same in villages."

"Our ultimate goal is not theatre, film or poetry but life today. This is a central point," he says. "How do we live today? Man produces 150 per cent of his needs yet people starve. Why?"

India's democracy, he believes, demands cultural diffusion. He asks, "Why should the lost men in the corners of our country be denied the films of Satyajit Ray?"

Movies made by great directors like Satyajit Ray, Ingmar Bergman and Akira Kursawa have been screened before village audiences in Heggodu and in other towns.

The repertoire of Ninasam includes Shakespeare, Moliere and Brecht translated into the local Kannada dialect. New plays by Kannada playwrights, plays for children and modern adaptations of Indian classics are presented.

Areca and pepper gardens provide the Subbanna family a comfortable living. But theatre is their passion. K V Subbanna's father first formed Ninasam in 1949 to stage local favourites based on the Ramayana and Mahabharata. K V Subbanna continued the work after taking a literary degree at Mysore University.

Since. 1985, his son group composed of Ninasam alumni. The group has given nearly 100 performances of popular dramas throughout Karnataka in the last six years.

The father, K V Subbanna, formed the Ninasam Theatre Institute. It is a "theatre ashram" which each year gathers a maximum of 15 students in a Candhi-like atmosphere of simple living and hard work. They are immersed in the theatre as well as martial arts.

A martial arts technique from Kerala state was introduced to stress the importance of physical fitness. A coach from Kerala teaches various methods of self-defence, including sword fighting. Students are also taught the various aspects of theatre, from directing to acting, from make-up to costumes, from backdrops to theatre art.

Under a grant from the Ford Foundation, Ninasam founded the first theatre school in Karnataka modelled on the National School of Drama at New Delhi. The three-year drama course there was condensed into a one-year course at Ninasam.

From 1983-85, a team of two instructors and one director travelled Karnataka state. They brought with them basic theatre tools, like lighting and stage props. In a year the team visited six different places and held workshops lasting six weeks. It also trained Siddhi tribals in dramatics. The Siddhis (11 of 25 participants were women) presented an adaptation of Things Fall Apart, play by Nigerian writer Chinua Achebe.

Under the grant, Ninasam also set up the only rural film society in India to publish books on film education and arrange film appreciation courses. He declined renewal of the two-year project, saying "the problem with grants to we'll be losing our foot. We get used to easy money which 's many times dangerous."

In the last 10 years, Fie Ninasam Theatre Institute staged 30 major productions, both eastern and western plays adapted to the rural contest. It has made 850 performances in the last six years. The alumni's theatre group also travelled Karnataka, performing dien in open-air theatres before crowds of 700 or more,

Cinema is also one of Ninasam's languages, Since the 1970s, it has shown film classics to Karnataka audiences. Today, participants in courses are introduced the works of leading film-makers

Photo: Shashya Tathya, UNICEF.

around the world. "By taking such films on the road alongside its stage plays, Ninasam is bridging the gulf between urban and rural culture," the Ramon Magsaysay Award's citation says.

K V Subbanna describes theatre in India today: very traditional in the southern state of Kerala ("difficult for them to break out"). In the easternmost state of Manipur, near Burma, theatre is "tradition-bound, you can't find modern plays." Karnataka, he says, is in the middle, modern and traditional.

"Striking a balance between the two, modern and traditional, is important," says K V Subbanra. "You can't explain how to blend the two, it'll have to be a rade-off. We put it to our ausience, what they like. What they don't like, we

change. He says it's not a matter of being 80 per cent traditional and 50 per cent modern and so on "Balance must be maintained not only in art but in everything: politics, society. Times change. Yesterday is not today. One should be changing every day, your democracy, your theatre, your poetry," he

In Manila recently to reerive his Magsaysay Award, he told a group of young theatre : nthusiasts, "Give yourself up to the life force going on

K V Subbanna has declined a state award before, leeling that it gives the impression that awardees are superiors to others. But he decided to receive the Magsaysay Award since it is basically in appreciation of community effort rather than personal achieve-

"The award is the recognition of the efforts of the entire team which joined me in making the experiment of Ninasam a success," he says. And it will be up for the whole Ninasam group to decide what to do with the US\$30,000 award.

Pepper farmer, poet, writer, and a veritable figure in Indian theatre, K V Subbanna himself plays many roles. He also publishes new works by south Indian writers as well as his own poems and prolific translations of foreign movie scripts and books. Depthnews.

## 7 HEN the N-250 aircraft rolls out of the hangar in Indonesia in 1994 it will mark a milestone for Asian aviation - the first aircraft totally designed without outside assistance. It could also change the face of

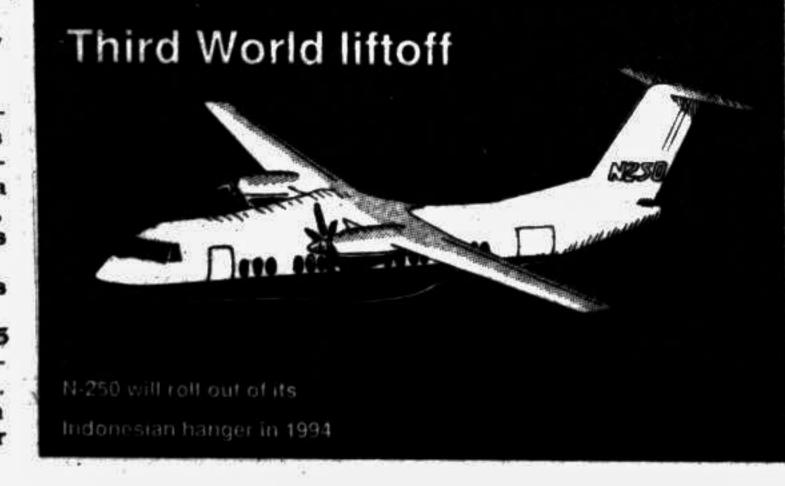
Indonesian aviation. The manufacturer, Nusantara Aircraft Industries (IPTN), has been making planes and parts under lieence from foreign makers of 15 years. The turboprop N-250 aircrast, expected to be ready for delivery in 1996, will be a high technology product but of simple, sturdy design, with low fuel consumption. Scating 50, it will have the widest body in its class.

The second national carrier, Merpati (which means pigeon), has ordered 65 N-250s (N stands for Nusantara or archipelago) and Bourag, another domestic airline, has ordered 32.

The new plane also has many more potential customers among the country's 45 private, church mission, mining industry and other airlines. Export potential has been demonstrated by a first order

## Indonesia Designs its Own Aircraft

Indonesia's only aircraft manufacturer has long made a name for itself building other people's aircraft. Now Nusantara Aircraft Industries has designed it own, a turboprop called the N-250. The new aircraft should be ready for delivery by 1996 and orders are already coming in.



of 24 by the Swedish aircraft leasing company FFV.

The aircrast is aimed at regional carriers, which often have problems transferring passengers from international to domestic routes. Designed to give passengers the same feeling of safety and comfort as big jets, the N-250 will have wider aisles than other plane in its category. Its engine will also be quieter.

The main reason for developing the new aircrast is to meet Indonésia's own domestic needs. A booming tourist industry creates an ever increasing need for domestic feeder flights from the main international arrival points like Jakarta.

Garuda, the national airline, uses jets to link 35 domestic destinations. Merpati hops to around 110 destinations with mostly propellor-driven aircrast.

In Irian Jaya (Western New Guinca) there are no fewer than 40 airstrips. Caruda operates an eccentric collection of aircraft, including Vanguards, Viscounts; 707s, Skyvans, Hercules and Twin Otters.

In small departure lounges fruit and local snacks are

launched rockets.

technology environment of international aircrast manufacture has been no easy accomplishment. But the proven competence of IPTN at assembling other companies' aeroplanes and the creativity needed to assemble its own indicate the arrival of a serious contender in the aerospace industry. - GEMINI NEWS