

# Trade gap likely to widen

WASHINGTON, D.C. - Industrial countries should keep the doors open to both labor-intensive manufactured goods and agricultural products from the developing nations to help cover the growing cost of grain imports, Dr. Fred H. Sanderson told a conference on food policy here April 29. Dr. Sanderson is a guest scholar at the Brookings Institution, here.

Sanderson noted that population growth and food demand in the third world will widen their food gap, even with faster gains in food production through 1985. The grain deficit of the developing countries is likely to increase from 40 to 60 million tons by then, and import costs will rise from

\$4.5 billion to \$7 billion (at 1976-77 prices).

Under present trade policies, expanding exports, excluding oil from the third world could rise from \$120 billion presently to \$200 billion by 1985, a gain greatly exceeding the cost of projected grain imports. But, he noted, this could be curtailed by greater resistance to imports by the industrial nations. In any event, grain imports will continue to be a significant balance-of-payments on the poorest countries, which account for about 40 per cent of the grain deficit.

Sanderson also suggested that the added gains by the third world from trade liberalization, special preferences granted to the

exports of the poorest nations, and even the income-boosting potential of cartels loom small beside the trade expansion that can be expected from continued economic growth.

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## LIFE on the farm

By DIETER KRIEG

Life on the farm has come to a standstill as far as input from men and machines is concerned.

It's bedtime.

After a busy Spring day of planting corn, milking cows and performing a variety of routine barn chores, the hours of rest are welcome.

Motors, tractors, lights -- they're all shut off.

What remains in gear is my mind. Sometimes I wish God had provided me with a switch to turn it off too.

Spinning through the brain are thoughts of having to fix a leaking hydraulic hose, buying more fertilizer to finish planting corn, Stripy's trampled teat, and a clogged drain in the floor of the milkhouse.

Those are just a few of the problems which might develop during the course of a day on the farm. Each will take some time away from tomorrow's schedule, and the hours spent perusing over these issues at

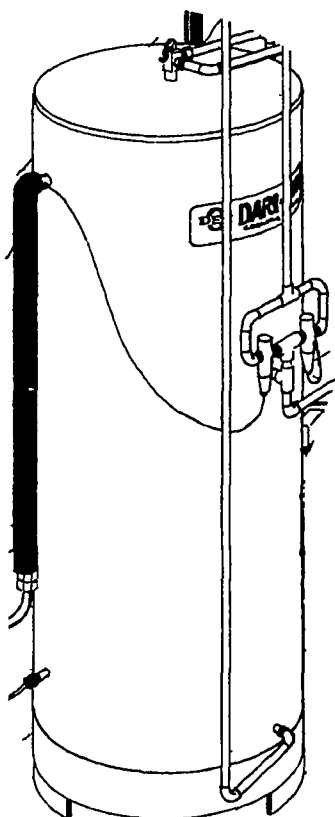
night shorten rest periods considerably.

It's not just problems which are reviewed, the day's accomplishments and plans for coming days and weeks also come to mind. Occasionally there's some mental arithmetic going on to calculate production trends, costs, income, and feed delivery dates. My arms and legs might be tired enough to want to sleep, but that little rascal between the ears wasn't allowing me to do so. I suppose the brain gets so wrapped up in a profession that being occupied by it during the day just isn't enough. It has to keep humming into the night until at long last the concerts of crickets and frogs become a too powerful lullaby.

Thank God for crickets and frogs and Nature's other soothing effects such as gentle breezes whispering outside the bedroom window or rain tap-dancing on the roof. Without them, life on the farm wouldn't be the same.

## INTRODUCING THERMA-STOR

Dairy Equipment Company Madison, Wisconsin has added a new energy saving Therma-Stor condensing unit to its Dari-Kool Bulk Milk Cooler Line.



The Therma-Stor is a major improvement in water cooled condensing units. This unit has an all stainless steel heat exchanger combined with a 150 gallon stainless steel storage tank. This unit provides enough 110 degrees water for prepping cows and general use while milking. It also stores 110 degrees water for use between milking. In addition the Therma-Stor produces 50 gallons of 165 degrees for pipeline wash-up after milking. This unit is available with a single or dual condenser.

### A NEW WATER COOLED CONDENSER - THERMA-STOR

For years water cooled condensing units have been used not only for bulk milk coolers, but refrigeration units of all types. The main reason water was used, was to lower the condensing temperature of the refrigerant. This increased the efficiency of the condensing unit.

Large quantities of 70 degrees - 80 degrees water was the useless by-product of these units. Because of the high original investment and maintenance cost, this style unit is not commonly sold on milk coolers today.

Then things changed. Energy costs have doubled on most farms in the last few years, 165 degrees F water now costs a dairyman 1/2 cent, to 2 cents per gallon. The average dairy uses two gallons of hot water per cow, per day for udder washing, sanitizing, washing equipment, feeding calves and general clean up. This means an average cost of \$2-day or \$700-year for a 100 cow dairy. This revived the water cooled condenser concept for dairy farmers. A modern dairy used 110 degrees water for equipment sanitizing, udder washing, rinse cycles on the pipeline and the bulk cooler, calf feeding and hand washing. Only the wash cycle of pipeline and the milk cooler require an elevated water temperature of 165 degrees F. The profile of usage on an average 100 cow dairy is 400 gallons of 110 degrees water and 70 gallons of 165 degrees water.

A water cooled condenser can deliver 165 degrees water, but the condensing temperature would be very high. The results would be poor efficiency and short compressor life. The lower the condensing temperatures, the higher the efficiency and the longer the compressor life.

One of the innovations on the market today generates a gallon of 100 degrees water for every gallon of milk cooled. It also generated 50 gallons of 165 degrees at each milking. This unit combines an insulated 150 gallon stainless steel storage tank and a stainless steel heat exchanger into one. The condensing temperature in this unit is determined by the 110 degrees water. The 165 degrees water is generated by desuperheating the refrigerant. Storage of the 110 degrees and 165 degrees water is necessary for usage at times other than milking.

A small backup 165 degrees water heater is recommended. There is no need for a backup on the 110 degrees water because excess is usually generated. The refrigeration system is very conventional regarding controls, valves and compressors. The condenser storage tank is the only special piece of equipment required. This condenser storage tank can be added to most refrigeration systems.

The investment of this equipment is returned by the savings in electrical energy in a year or two on the average dairy.

With the addition of Therma-Stor to an existing air cooled condenser refrigeration system your milk house can be partially heated and there is no water wasted.

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## Deadline nears for tobacco insurance

LANCASTER - The deadline for securing crop insurance for tobacco is drawing closer. Growers have the remainder of May to sign up for the USDA program.

Available from USDA's Federal Crop Insurance Corporation, the insurance is considered to be a worthwhile management tool, even if crop damage does not occur.

All-risk policies for tobacco are still available for many Pennsylvania counties, as well as a number of counties in neighboring states.

For further information, interested tobacco growers should contact the Federal Crop Insurance Corporation, 1721 Whiteford Road, York, Pa. Phone (717) 755-3416.



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