SECTION C

## GLUCOSE PRODUCTION FROM RAW STARCH IN CORN FLOUR

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Optimum ratio of glucoamylase to a-amylase for synergistic hydrolysis of starch in corn flour was 1.8 AGU/1.0 KNU. Hydrolysis of starch in dry milled corn was most efficient compared with that of wet milled corn steeped in water or NaOH. With increase in hydrolysis of starch in corn flour, release of proteins, reducing sugars and colour into the hydrolysate increased with a decrease in residual matter and filtration rate of the hydrolysate. Addition of B-gluconases and proteases did not improve the filtration rate of corn flour hydrolysate. However a change in pH of the corn flour hydrolysate from pH 5.0 to 4.5 increased its filtration rate. Addition of activated charcoal to corn flour hydrolysate at pH 4.5 further increased the filtration rate. Addition of charcoal had also removed the colour and proteins present in the hydrolysate without altering the sugar content. When 1.6 kg and 4 kg of corn flour suspensions were synergistically hydrolysed by a-amylase and glucoamylase and purified, glucose yields were 76% and 50.2% respectively. Glucose yields were calculated based on the total starch content in corn flour.

(AGU-AmyloGlucosidase Unit; KNU-Xilo Novo Unit).

difference in performance during 1978 - 82 cand thereafter; the latter period in many respects shows a disappointing record, import idependence external imbalance and external debt increased substantially in the post-1977 period. The dependence, to an unpre-deniad extern, on interestional occipital has far reaching implications for the economy, increased rate of investment in the period was not matched by domestic savings mobilisation.

The study also examines the growth-equity problems in the context of the liberalisation policies. The indications are that there has been a deterioration in income distribution and the Janasavia programme was introduced as an antipoverty measure, partly to counter the adverse effects of free market policies on low income groups.

The major thrust of the development strategy is on export-led industriailsation. But in the context of the current growth trends, the pattern of industrial production and the global economic environment, this continues to be an uphill task.