

**National Pesticide  
Analytical  
Laboratory (NPAL)  
& PAL Satellite  
Pictures**

I. NPAL

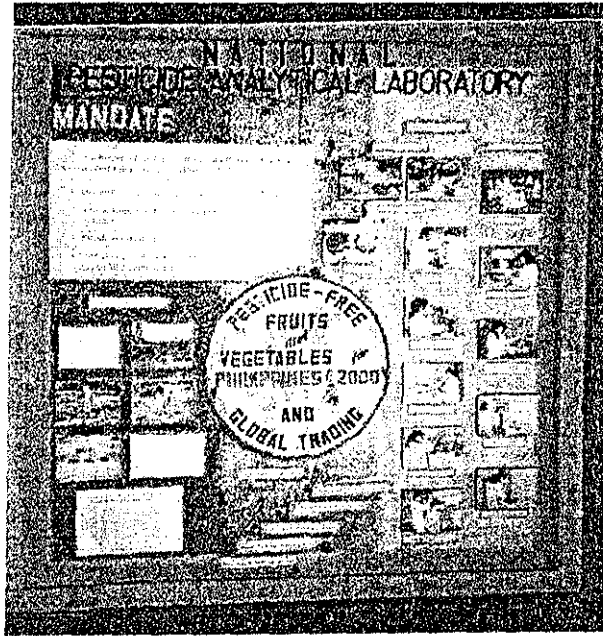


Figure 1 .

Activities of the NPAL both for formulation and residue unit.

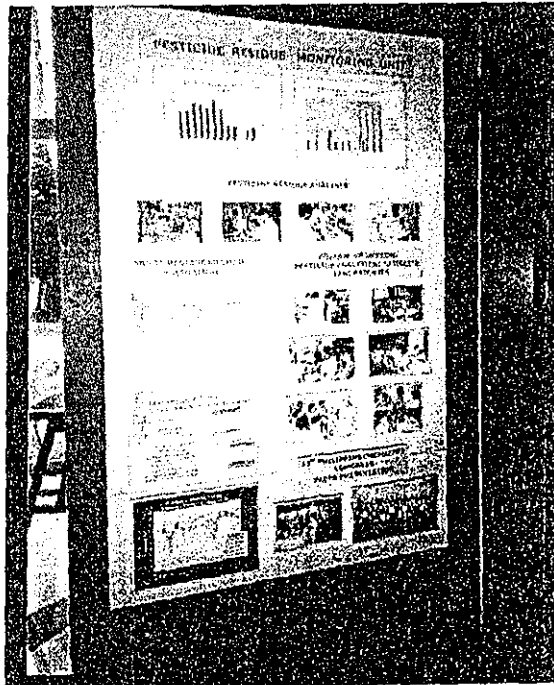


Figure 2 .

Activities of Pesticide Residue Unit

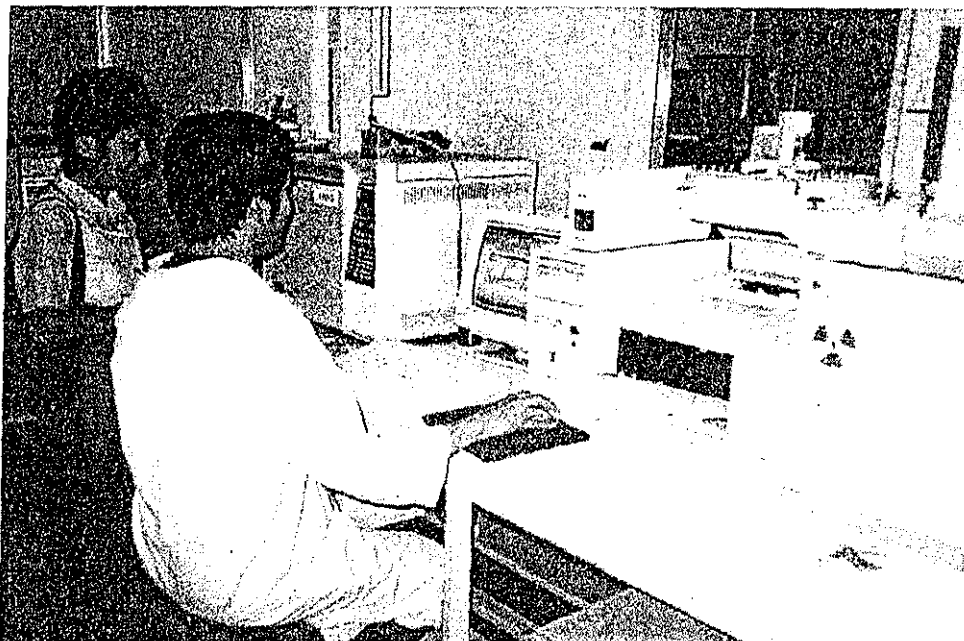


Figure 3 .

The NPAL staff is retrieving GC chromatogram for pesticide residue analysis

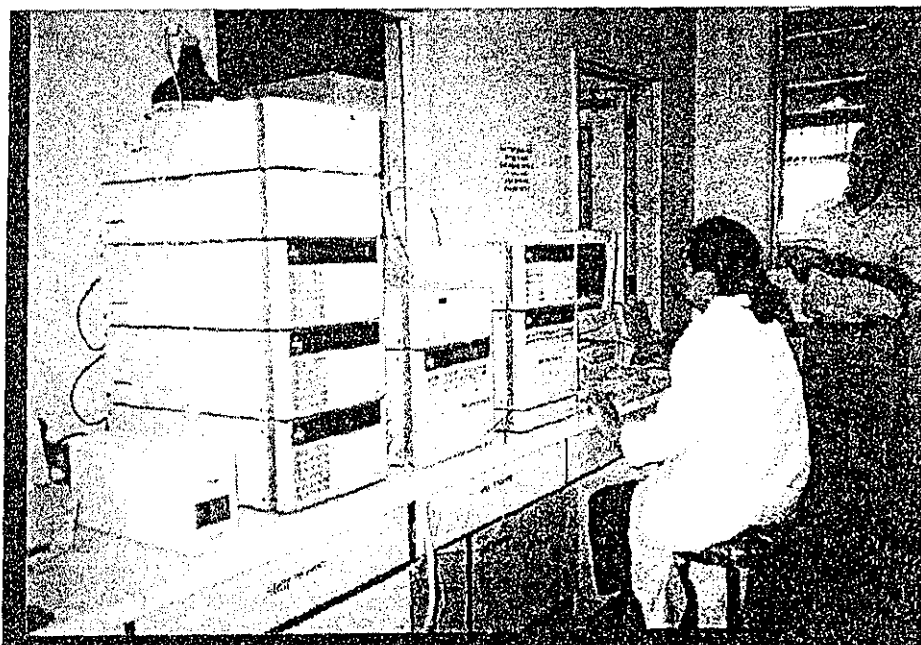


Figure 4 .

The NPAL Staff is retrieving HPLC chromatogram for pesticide analysis

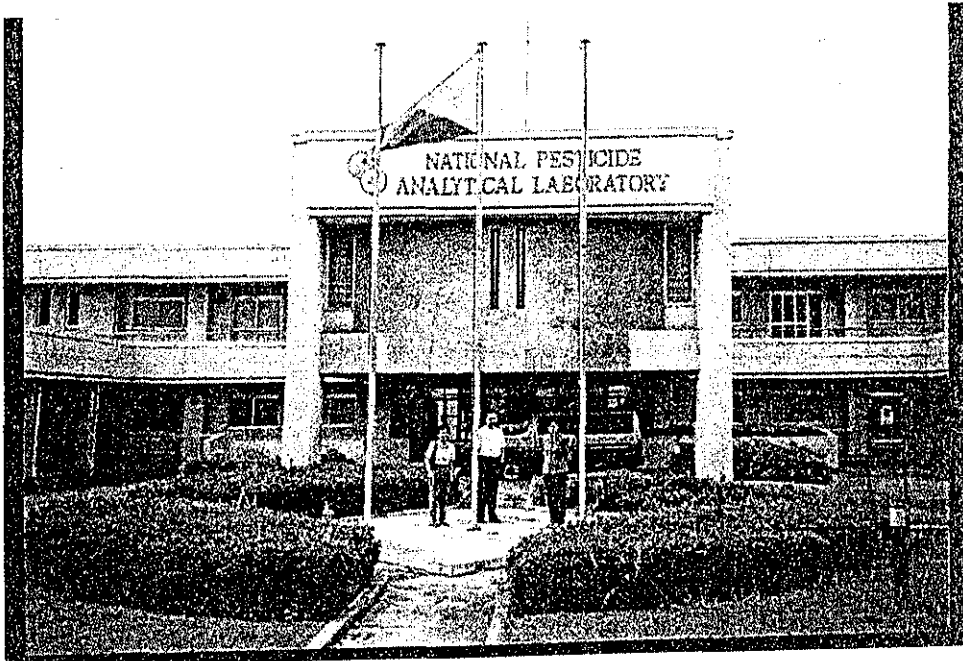


Figure 5 .

Front view of the NPAL located at Diliman , Q.C.

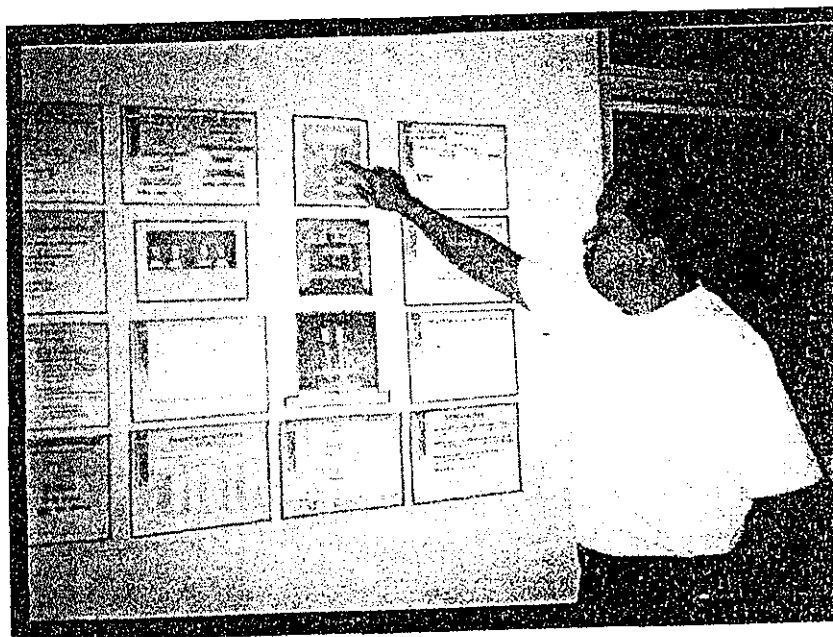


Figure 6 .

NPAL staff showing the validated PMDP Method

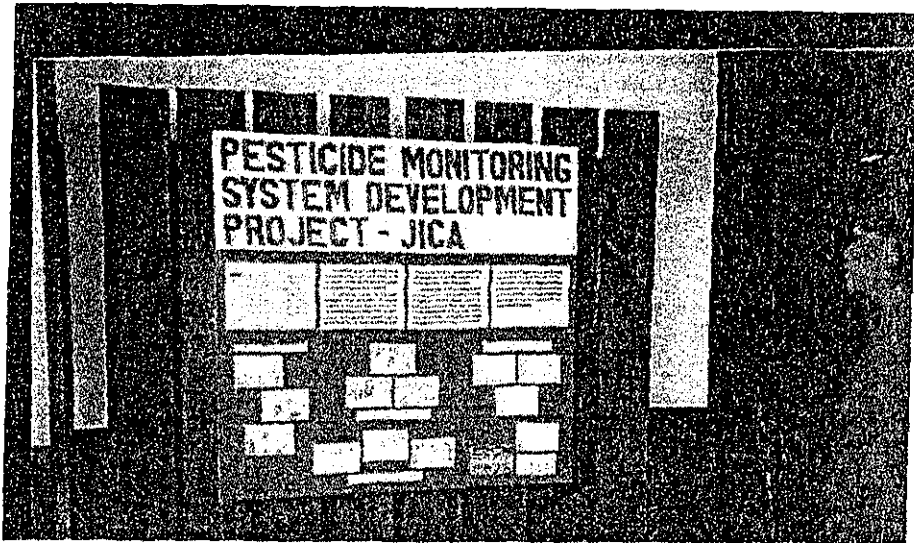


Figure 7.

The PMDP Activities

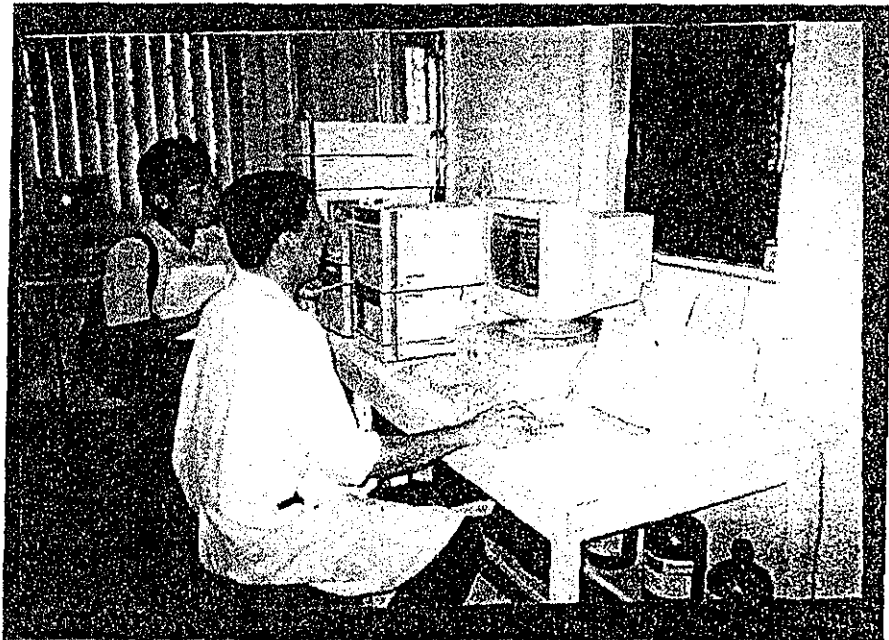


Figure 8.

Formulation Analysis staff retrieving results from PHLC.



Figure 9 .

Formulation Analysis staff weighing sample of pesticide formulated product.

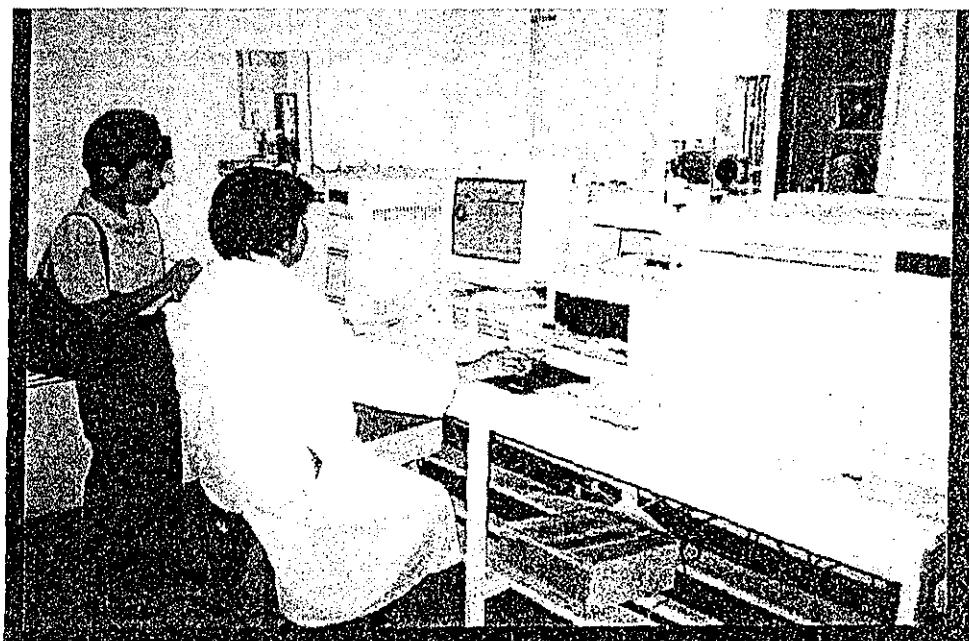


Figure 10 .

Retrieval of Pesticide Formulation results from GC.

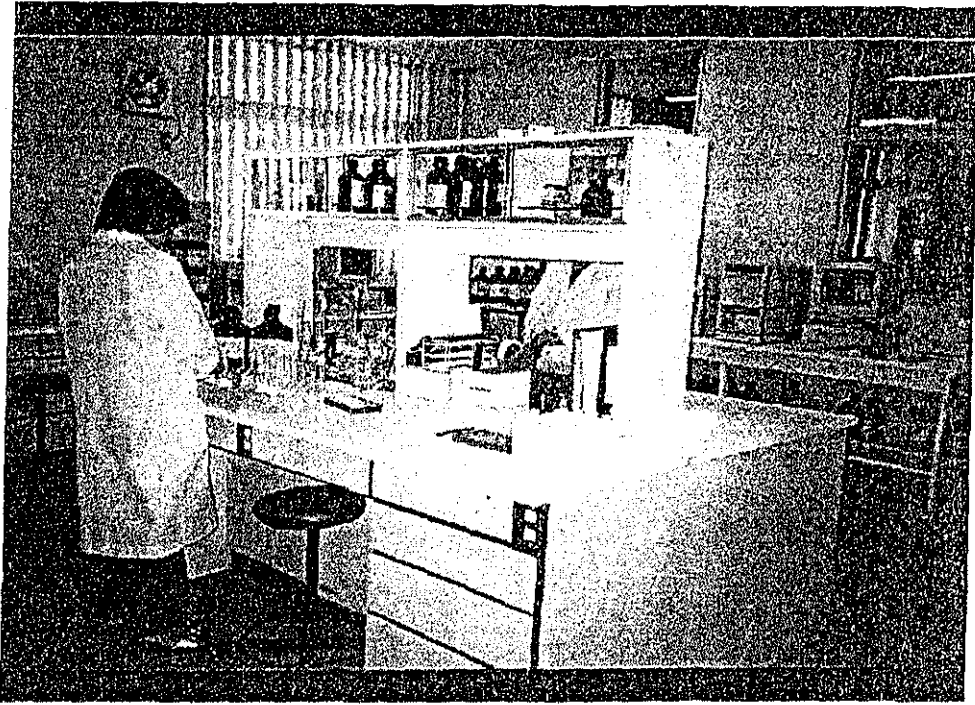


Figure 11 .

Preparation (filtering) of pesticide formulated product prior to injection

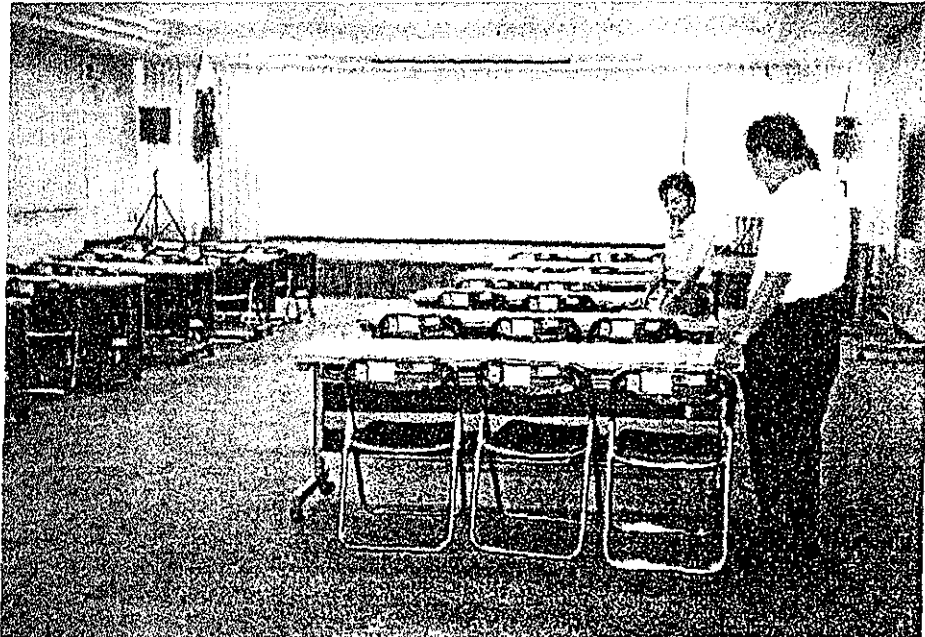


Figure 12 .

The NPAL seminar Room.

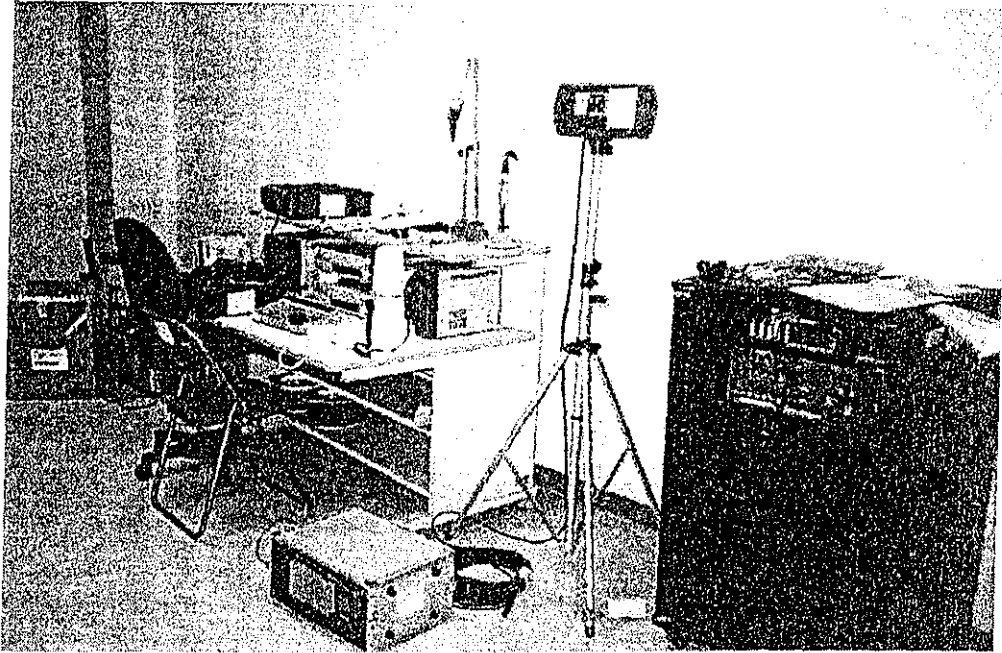


Figure 13

NPAL Audio System Equipment and Facilities



## 2. BAGUIO PAL

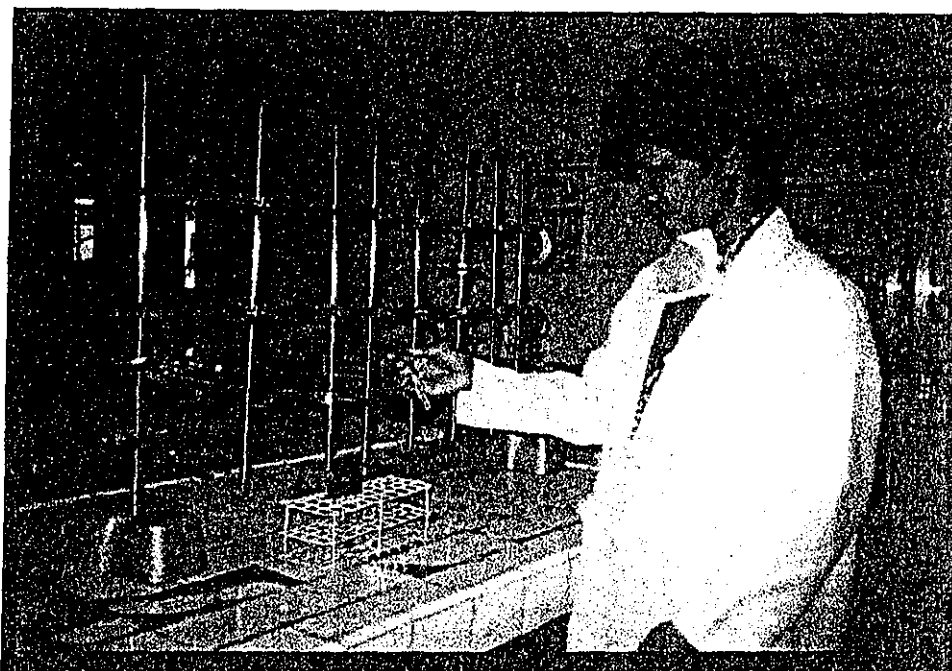


Figure 1 .

Baguio PAL Staff preparing a vegetable sample extract for the injection to the GC for the pesticide residue determination.

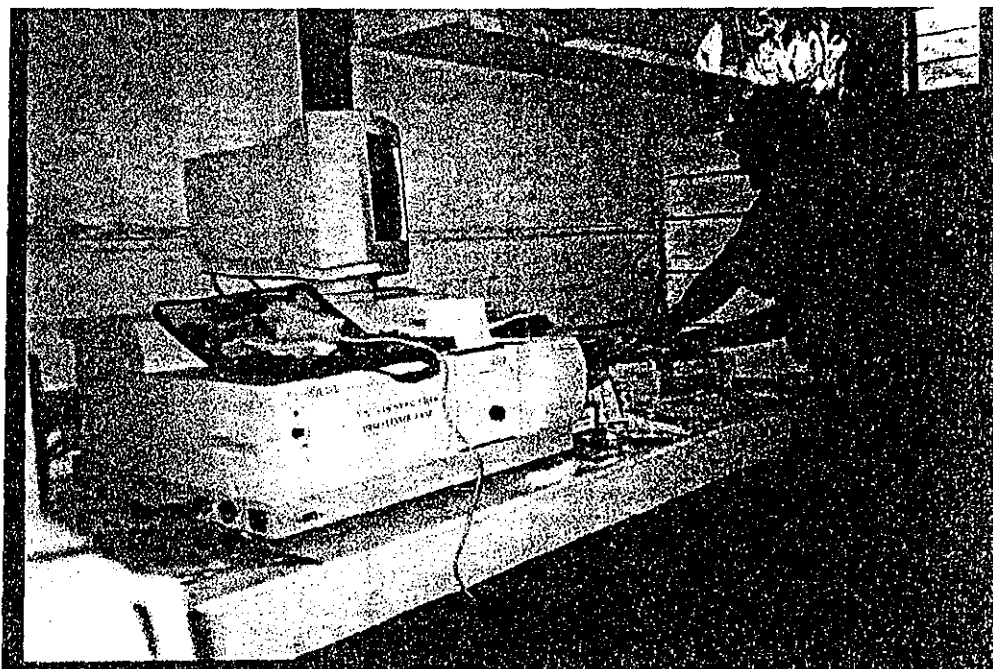


Figure 2 .

Mr. Walfredo Cinco, NPAL Technician doing repairs on the UV-VIS Spectrophotometer in the Baguio PAL.



Figure 3 .

Vehicle donated by the JICA Project to the Baguio PAL.



Figure 4 .

Baguio PAL Building, renovated by the GOP that <sup>with</sup> equipment donated by JICA.



Figure 5 .

Baguio PAL Chief D. Ceniza points to the site of the supervised pesticide residue trials at the Baguio Pal during the PTTC -PMDP

### 3. BICOL PAL



Figure 1 .

Vehicle donated by the JICA Project to Bicol PAL.



Figure 2 .

Evaluator interviews Mr. Saunar, the FPA Provincial Officer in Albay, Camarines Sur.

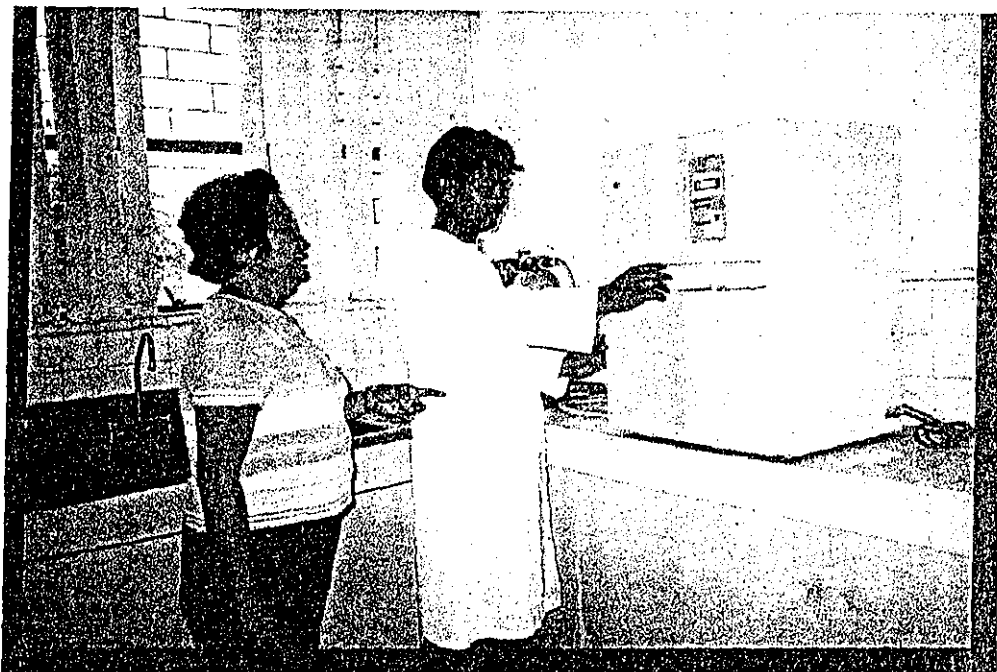


Figure 3 .

Ms. Paz Austria , Chief of the BPI lab service a division and the former project counterpart instructs a Bicol PAL staff in the use of the Distilling Apparatus.

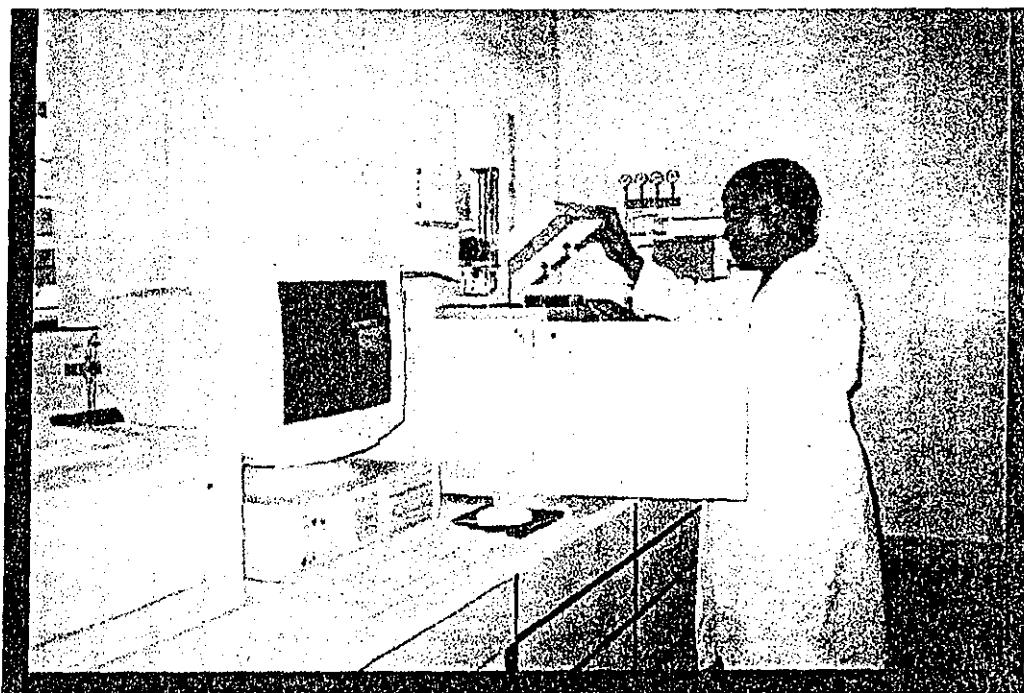


Figure 4 .

Bicol Pal staff troubleshooting a GC.

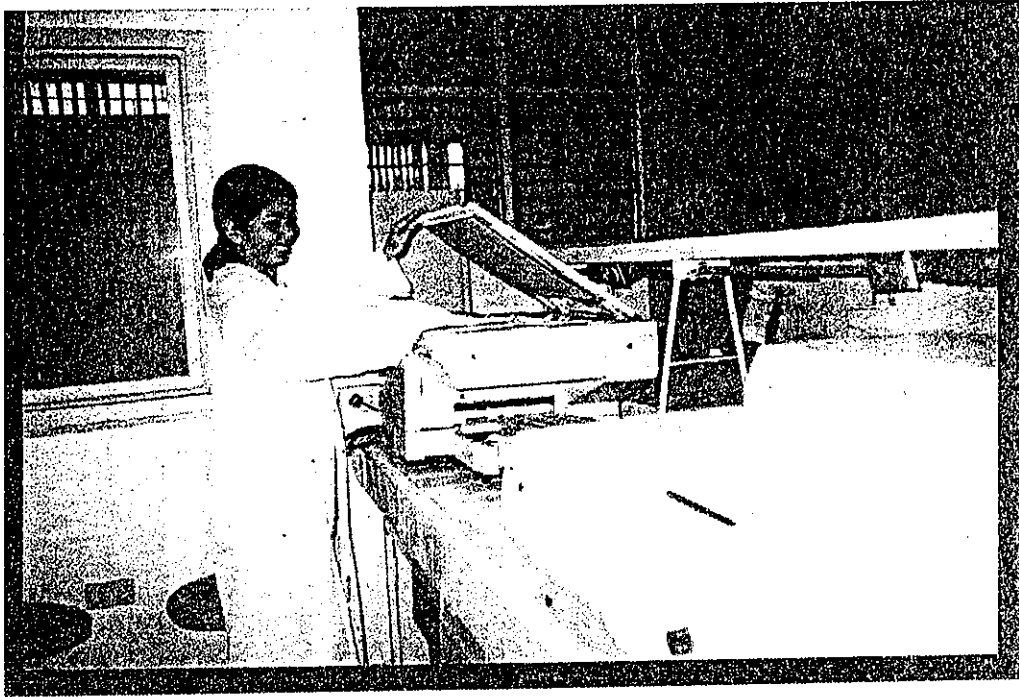


Figure 5 .

Bicol PAL Staff shows that the photo copier is still in good running condition.



Figure 6 .

The reconstructed building of the Bicol Pal that houses the equipment donated by JICA.

#### 4. CEBU PAL



Figure 1 .

Cebu PAL Chief and the technical team discuss both Grant Aid and PTTC frameworks prior their FGD Discussions.



Figure 2 .

Cebu PAL Heating mantle which is never used for analysis.



Figure 3 .

Cebu Pal vehicle is in good running condition.

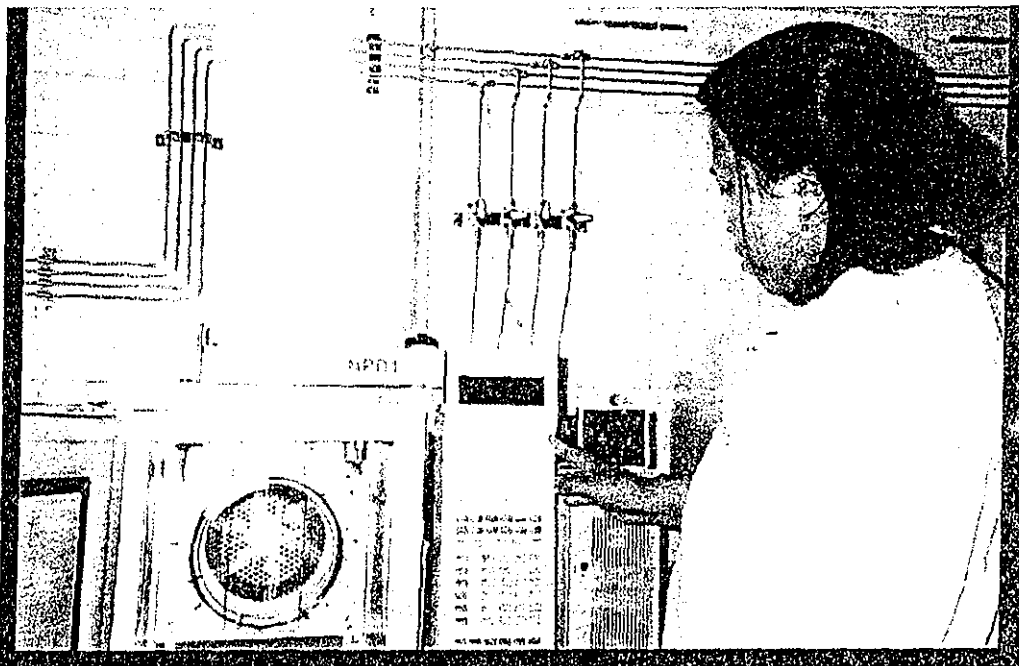


Figure 4 .

Cebu Pal NPD showed to have electrometer fault and disabled EPC



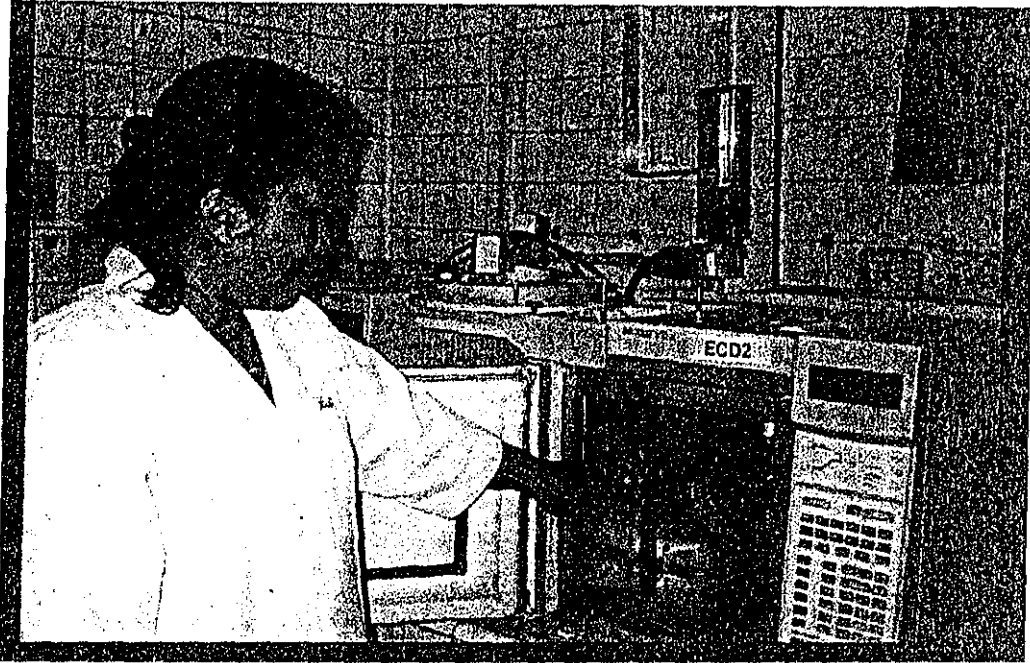


Figure 5 .

Cebu PAL ECD with dual detector not in use due to oven shutdown.



Figure 6 .

Cebu Pal FPD not functioning due to oven sensor and back detector shutdown.

## 5. CAGAYAN DE ORO PAL

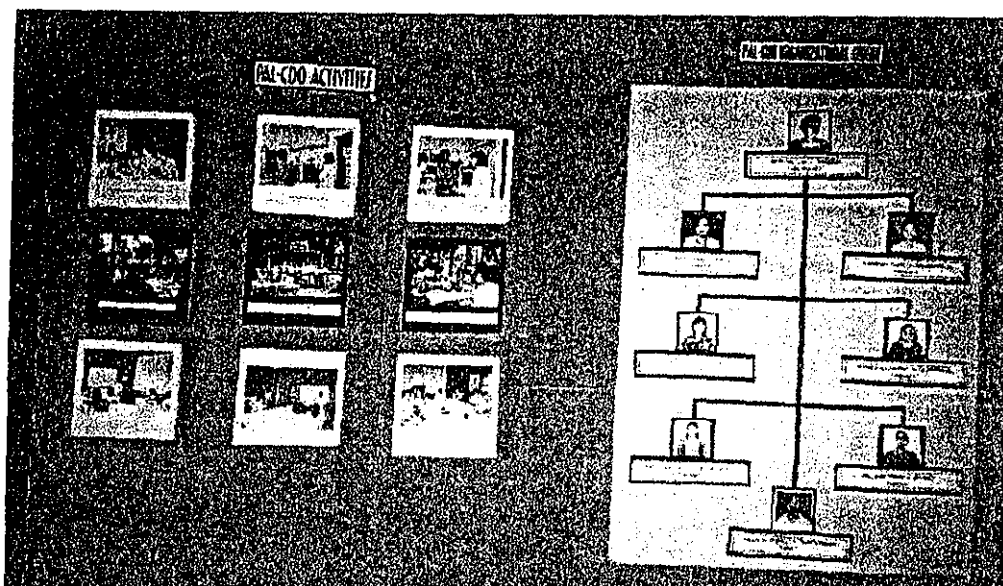


Figure 1 .

Cagayan de Oro PAL Staff and Activities.

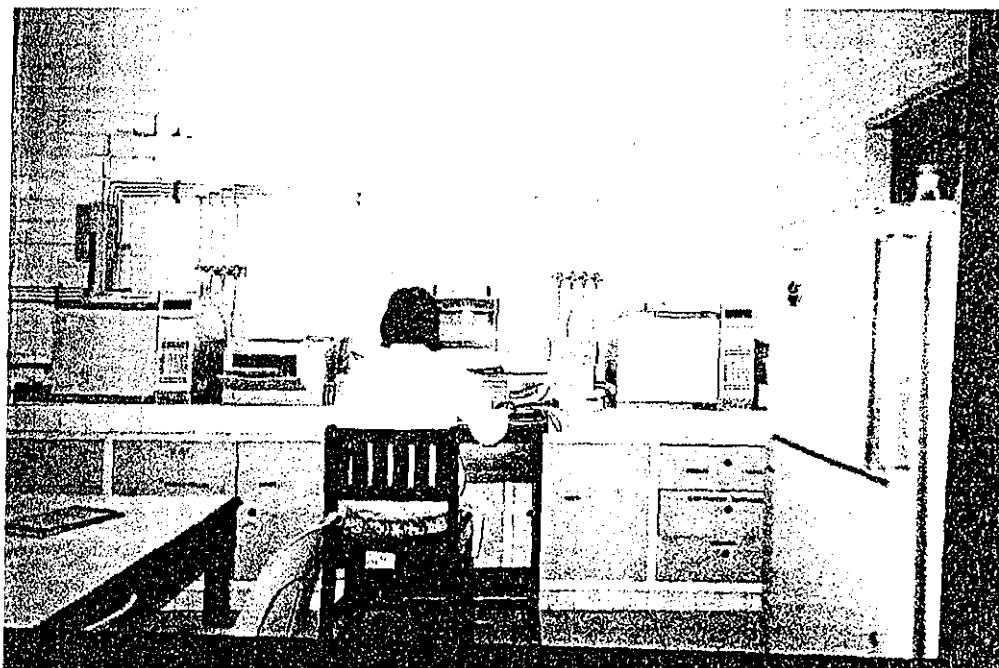


Figure 2 .

Cagayan de Oro Pal Staff retrieving results from the GC.



Figure 3 .

Cagayan de Oro PAL Staff checking the condition of the GC prior to sample injection.

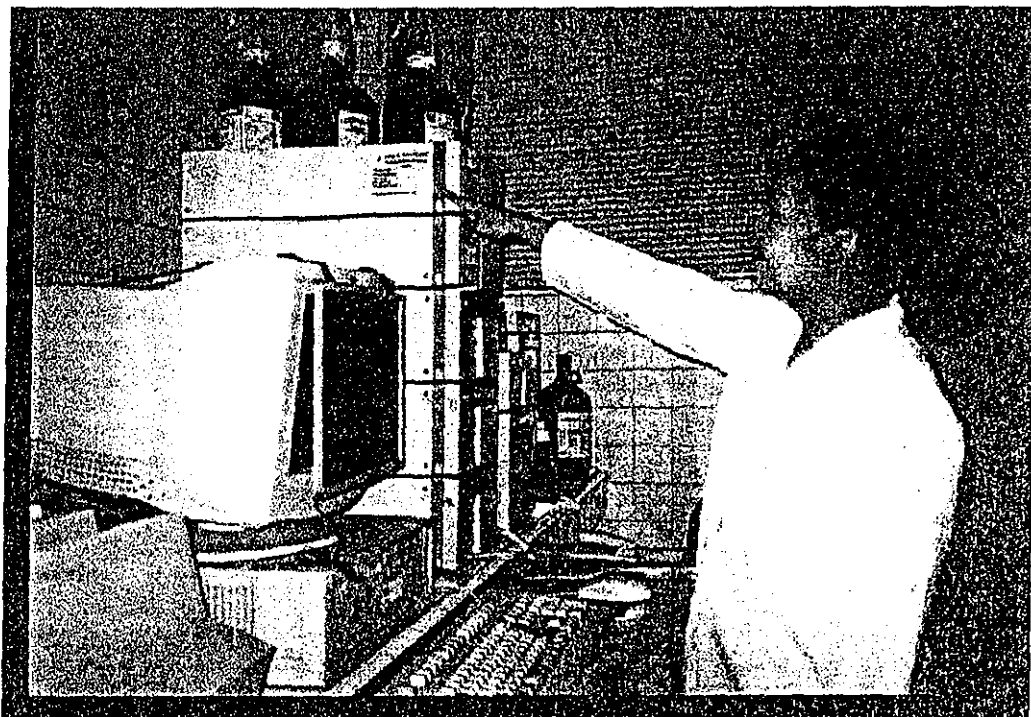


Figure 4 .

Cagayan de Oro PAL Staff showing the HPLC equipment.

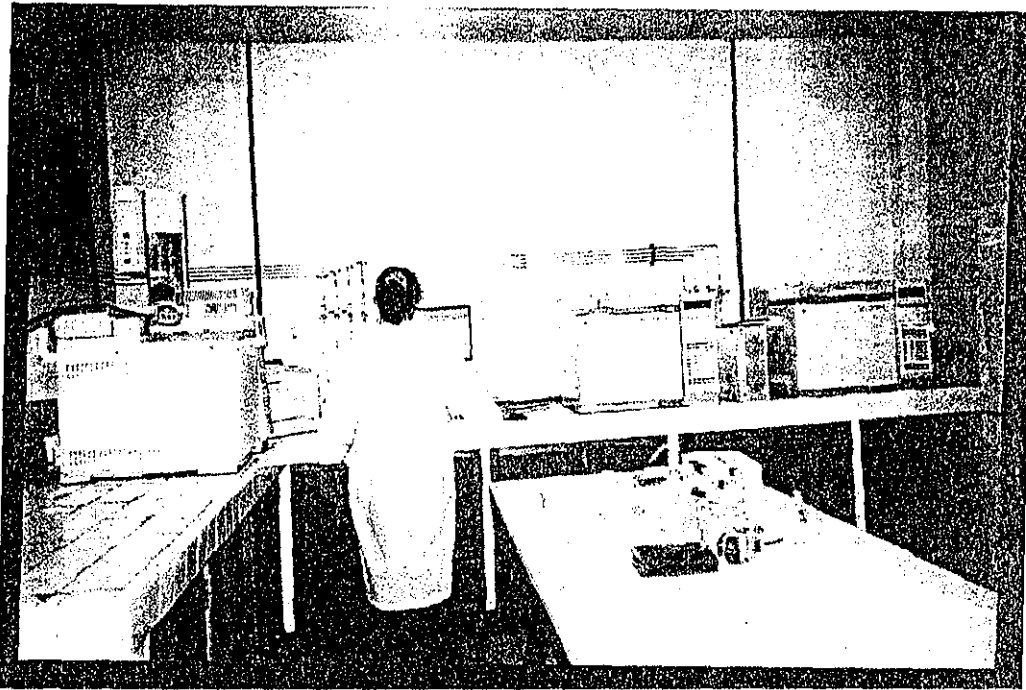


Figure 5 .

Cagayan de Oro PAL Staff showing the HPLC equipment.

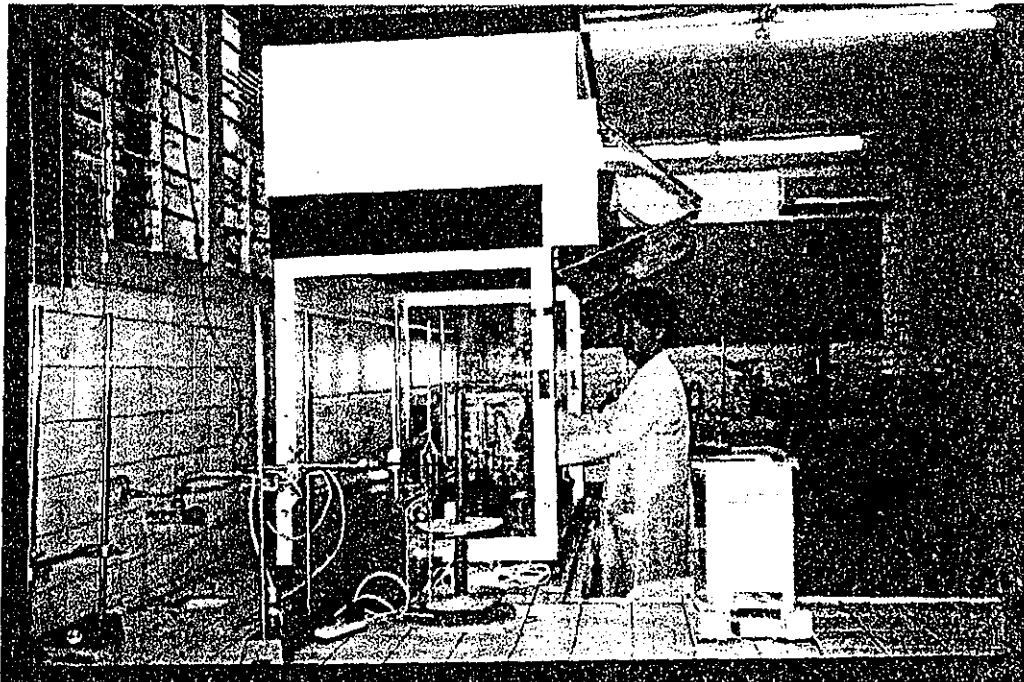


Figure 6 .

Fume hood that needs to be replaced in the Cagayan de Oro PAL.

## 6. DAVAO PAL

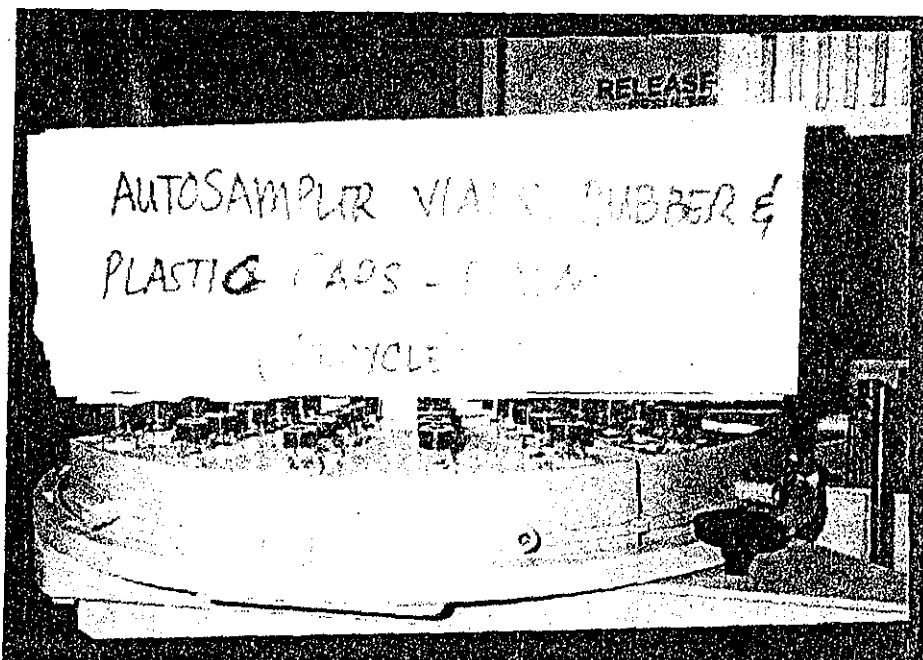


Figure 1 .

Davao PAL AUTOSAMPLER VIALS, RUBBER AND PLASTIC CAPS, Instead of disposing these accessories, we thoroughly clean them and recycle for saving purposes.

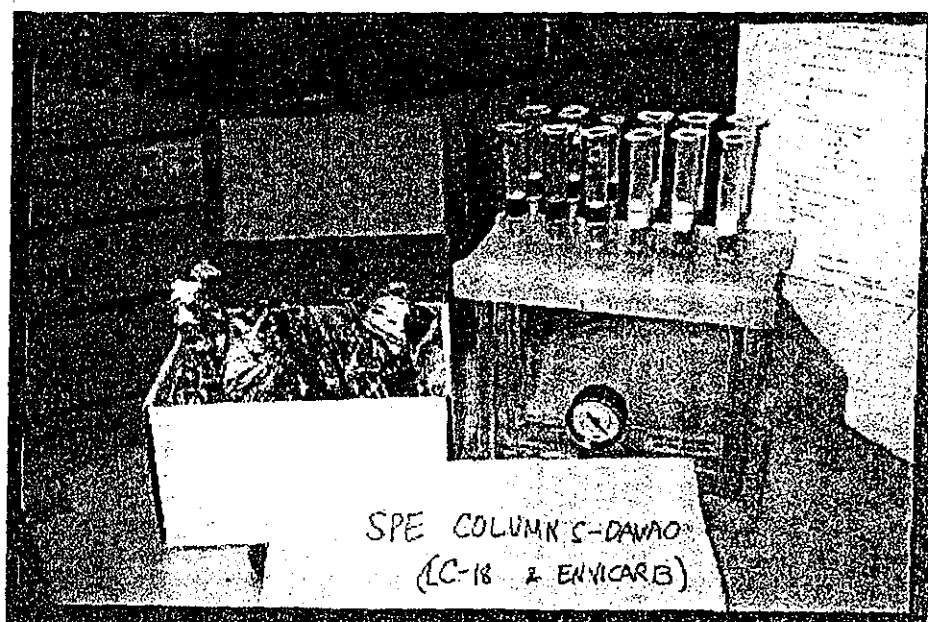


Figure 2 .

Davao Pal SPE COLUMNS (LC-18 and ENVICARB) , Necessary for cleaning up sample extracts in order to protect the capillary columns and detectors of gas chromatographs (GC's) However , these SPE cartridges / columns are very expensive ( Php 13,000/ 30 pcs. ) so instead of using them once , we recycle them 3 times after washing them with solvents.

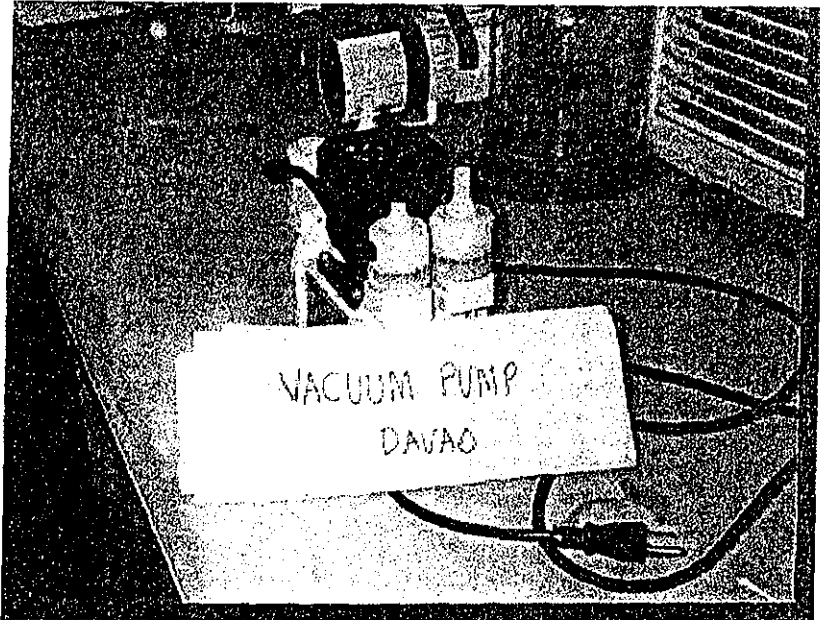


Figure 3 .

Davao PAL vacuum pump, the suction pressure is not enough to sustain a better and complete vacuum filtration.

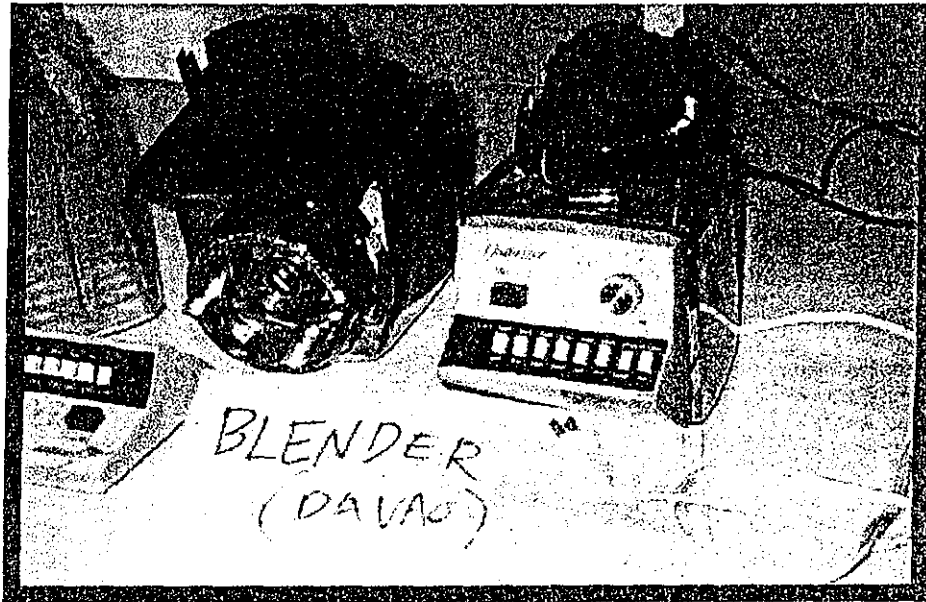


Figure 4 .

Davao PAL Blender Propeller is not working; the base is leaking.

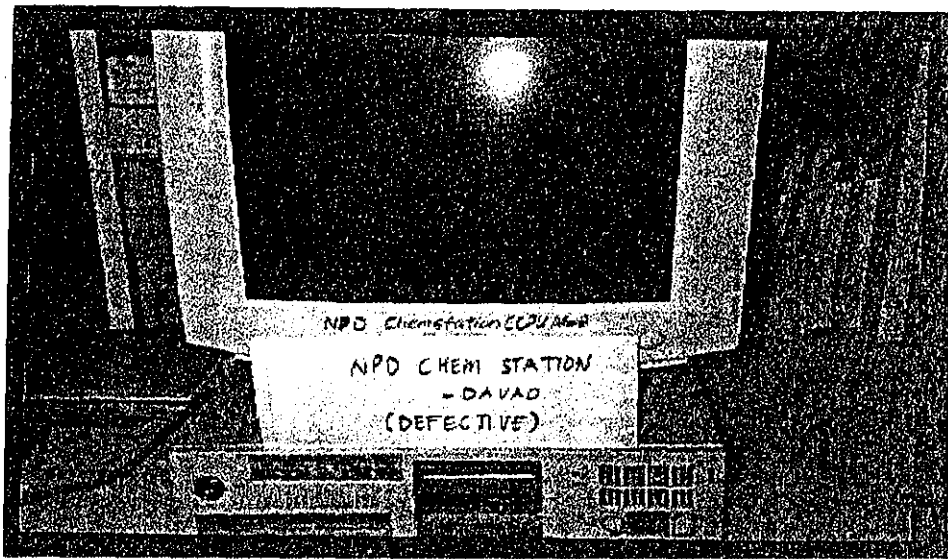


Figure 5 .

Davao Pal NPD CHEMICAL STATION, Processor in the CPU is not working anymore; monitor is blurred until stop functioning.

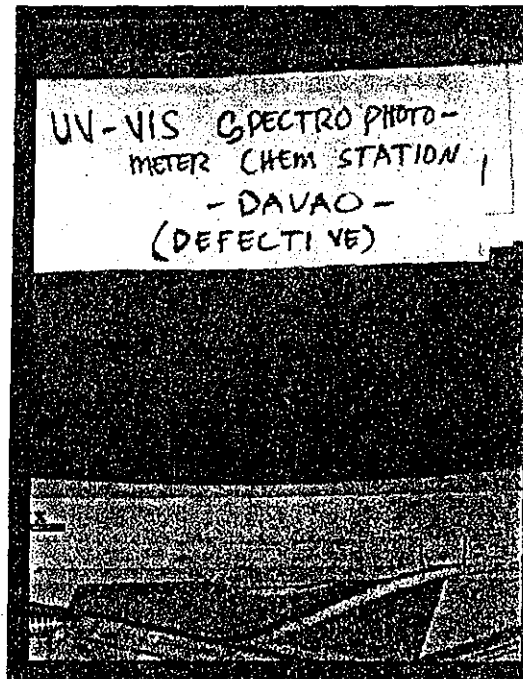


Figure 6 .

Davao PAL UV-VIS SPECTROPHOTOMETER CHEM STATION , Processor in the CPU is defective, monitor blurred.



Figure 7 .

Ms. REGINA IMPIG of Davao PAL, in the Chemical storage room withdraws solvent for extraction analysis.



Figure 8 .

Davao PAL GAS FILTERS, Very critical material for filtering Nitrogen, Helium and Hydrogen gases as to supply very clean and pure gases to GC's. When gases are replaced 13 times, this filters should be replaced with new ones but the supply are not available locally aside from being too expensive.



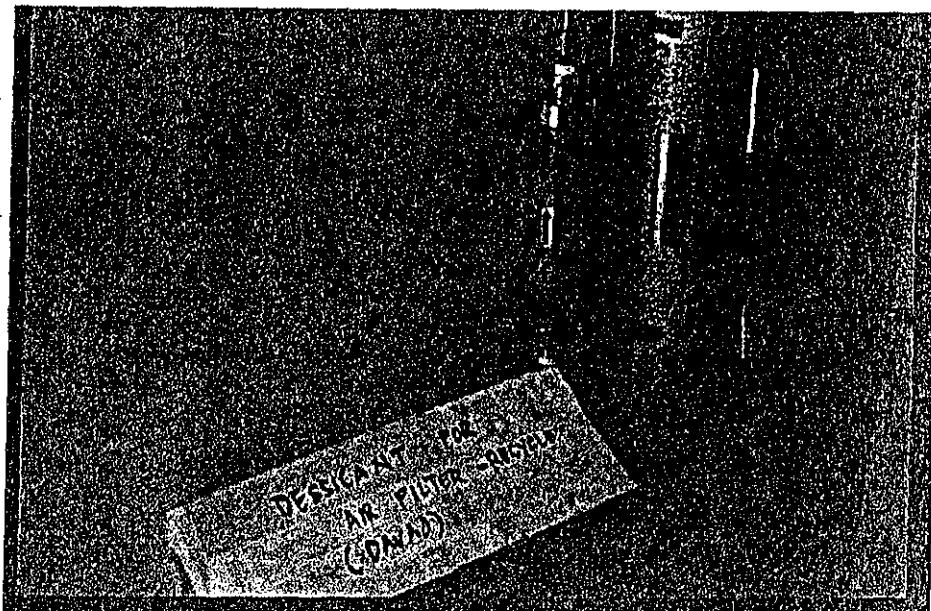


Figure 9 .

Davao PAL DESSICANT FOR AIR FILTER, Desiccant is needed to supply pure clean air to the GC's – NPD's; recycled by heating when become decolorized instead of replacing it with a new one.

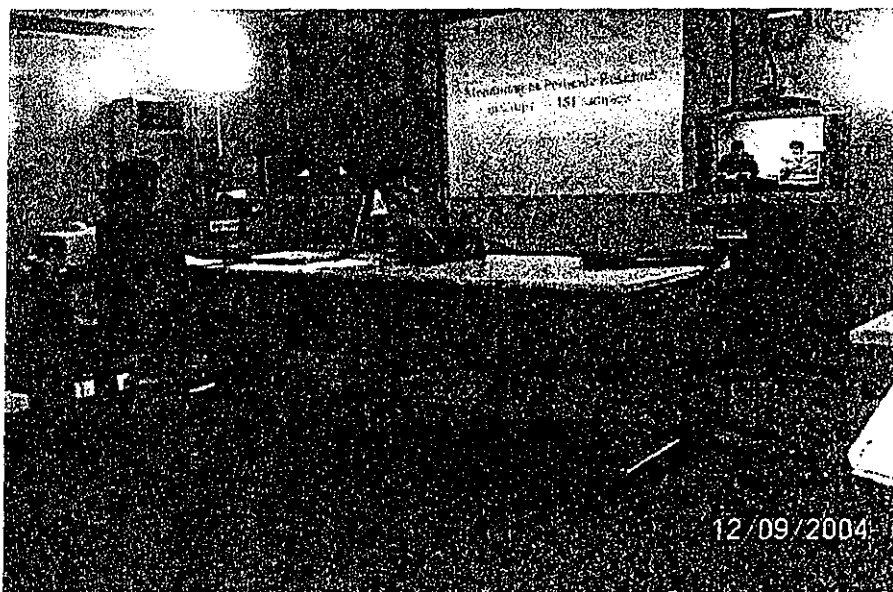


Figure 10 .

After the PMDP, Davao PAL trained staff communicate via video conference with JICA counterparts on new methods of pesticide monitoring.

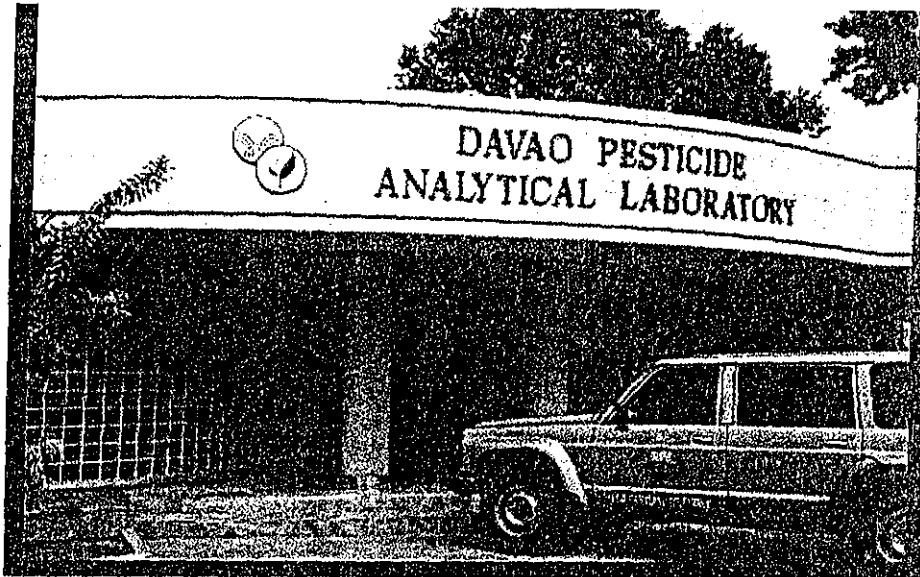


Figure 11 .

The Davao PAL facade and vehicle stand proud in the Davao Crop and Research Development Compound located in Bago Oshiro, Davao City.



Figure 12 .

The PTTC ex poste evaluation included FGD discussions between key people of the Banana Industry, FPA Regional Officer and Davao PAL Chief. PAL Davao's provision of analytical services and FPA monitoring support to the Banana Growers Industry in the immediate and long term was discussed.



Figure 13 .

The Davao Team admire Cavendish bananas for Japanese export grown by La Panday Plantation.



Figure 14 .

The Davao PAL Team pose in their conference room after the conduct of FGDs and Key Informant Interviews.