



Effects Of Plastic Bags On Morogoro

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Introduction:

The project "Ban the Bags" has its foundation on the fact that today there are a lot of problems that face the environment. A lot of developmental activities which are done in our community directly affect the environment or produce wastes which pose problem to environment.

environment and the animal species found in it. The project seeks to unveil the problems caused by presence of plastic bags in the environment, bring them into the awareness of the people in our community and hence proposing a better alternative than the plastic bags as well as encouraging the people to stop the use of the plastic bags, thus introducing the ban to the plastic bags in Tanzania which was firstly initiated in 2006. The ban involved only the ultrathin plastic bags with thickness less than 30 microns. The ban in its early stages failed because the Tanzanian government did not put enough efforts to make sure that the process is successfully and lack of serious supervision of the laws. Also involving only the ultrathin plastic bags, it encouraged the citizens to use the other types of plastic bags which the effects produced are the same and even much greater.



Method: The experiment was designed to test the preference, effectiveness and conditions at which paper bags the alternative to plastic bags would work the best.

The experiment involved three phases and each phase carried different conditions while covering duration of three consecutive days. In each day of particular phase a pack of 15 plastic and 15 paper bags were used from 4:00 pm to 10:00 pm. **PHASE 1:** This was the control phase, it was designed to test the preference of the people to either using plastic or paper bags at the normal conditions that the people are accustomed to.

AIM: To investigate the preference of people towards using either plastic or paper bags at normal conditions to which people are accustomed to. **MATERIALS:** 15 plastic bags, 15 paper bags

PHASE 2: The experiment was designed to investigate the preference of people to use either plastic or paper bags when people in the community have been given knowledge on the effects of plastic bags to the environment and their lives.

Results:

Phase 1

Larger number of people in the community at normal conditions opted to carry their goods in the plastic bags. It is observed in this phase that 62.22% of all the customers who visited the shop during the experiment opted to take their goods in the plastic bags while only 37.78% opted to take their goods in the paper bags. The situation in all the three days of this experiment is shown in the graph aside:

Phase 2

After being given knowledge on the effects of the plastic bags to the environment, the number of people who opted to take their goods in the paper bags increased from 37.78% in the first phase to 75.56% in the second phase. The above results were contrary to our expectations. We expected after being given knowledge, there would be no people who would opt to carry goods in plastic bags. But yet people still used the bags and it was thought that it's maybe because the bags were for free and some of the commodities were too large to fit into the bags that were used.

To verify that hypothesis we decided to conduct phase 3 of the experiment where there was a rise of 100 T.Shs. in price of the goods which were carried in the plastic bags.

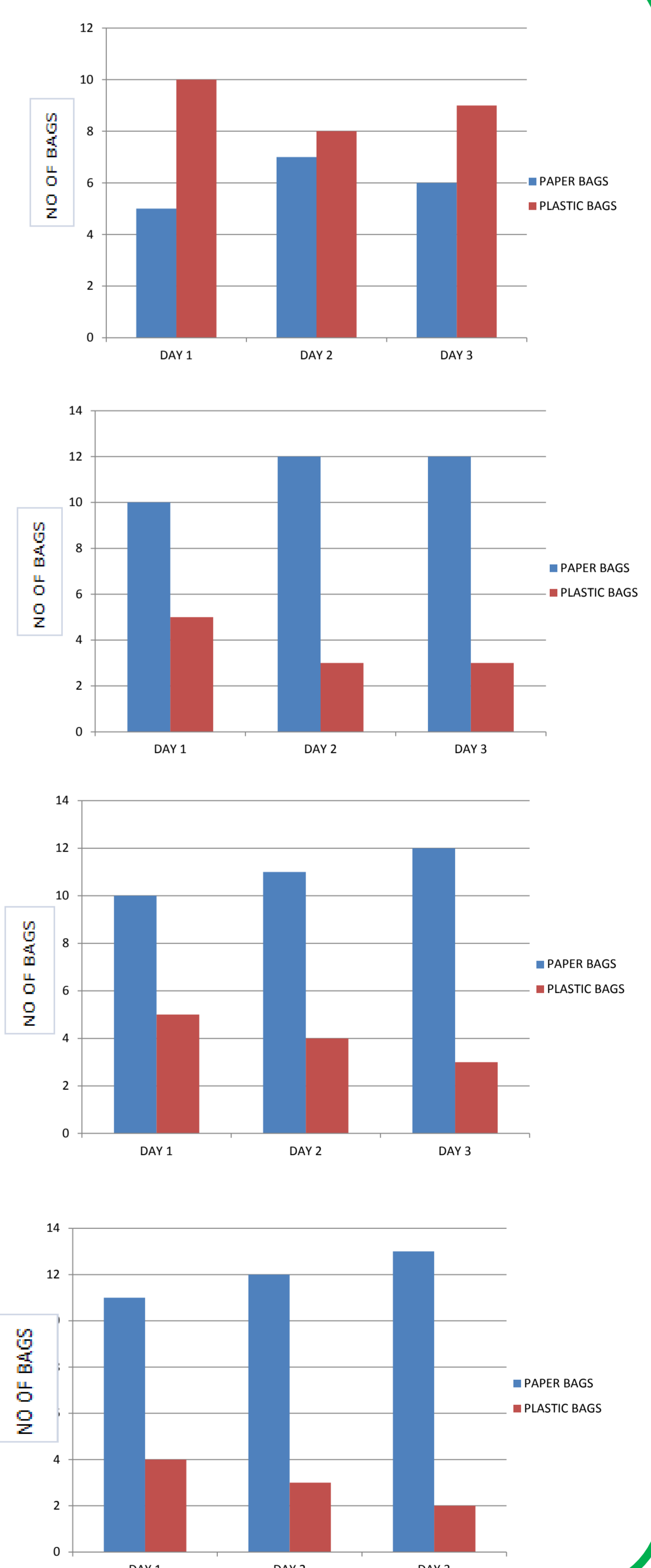
Phase 3

The number of people who visited the shop during the experiment and opted to carry their goods in the paper bags decreased by 2.23% as compared to those in phase 2.

Phase 4

The number of the customers who visited the shop and opted to carry their goods in the paper bags increased from 75.56% in the phase 3 to 80% in phase 4.

The percentage of the people who opted to carry their goods in plastic bags did not reach 100% because the paper bags which we used were not capable of carrying some goods in large quantity, for example an amount of 2 kg rice could not be carried in the paper bags which were used during the experiment.



Conclusions

It is also proved from the experiment with the paper bags that when the people in the community are well fed with knowledge on the effects of the plastic bags in our environment as well as the cost of the plastic bags is increased, they can change and adopt the new alternative which is environmentally friend, the paper bags.

The containers, aluminum wrappers and banana leaves can be used to carry fresh food which can not fit in paper bags. There should be thus a national wide campaign on banning the uses of plastic bags associated with consumer awareness programs on the effects of the plastic bags and emphasizing the use of paper bags of different sizes, baskets, containers and banana leaves as the alternative to the plastic bags.

References

The following references aided us in the project work., The Pegasus book of plastics., Organic chemistry part B by A. Abdullah.
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