

CHAPTER FIVE

5 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

In the 21th century higher education institutions have to face a series of challenges such as the promotion and implementation of sustainable practices through the participation of faculty, students and staff, which should be compromised in building a better future for the generations to come. One of the important objectives of sustainable development is the reduction of the use of non-renewable resources. A university or college uses many resources in the process of producing a well educated graduate who will go on to make important contributions to society and reflect credit on the institution. One of the important areas of focus for sustainable development is on waste. Different experiences have shown that the logistics and technology alone are not enough for a recycling programme to be successful because the human factor plays a key role. Thus, an important component of any recycling program is the communication and information campaign that seeks to reach the people intended to participate.

University of Malaya (UM) bought 50,000 reams of paper in 2008 and this amount increased by about 40% to 70,000 reams of paper in 2009. Currently, there were 17 No. of Faculties and research center and institution in UM. From all these places, that Residential Colleges with total person of 10730 person generated 625.15 kg of waste paper during one week, Offices (Art Asia Museum, Examination Building, Institute of Post Graduate Studies (IPS), Culture Center or Perdanasiswa, Department of

Development and Asset Maintenance (JPPHB) and Chancellery Building) generated 194.77 kg of waste paper with total No.of 3924 person and finally, Faculties generated 423.94 kg of waste paper with 27282 person including the staff and the students. There were different research studies done in the other universities based on waste paper.

5.2 Recommendation

Based on the results, this study makes several recommendations as follows:

5.2.1 Enforce the regulation on paper recycling programme in UM.

Research has been done in Ontario Universities, based on reduction of waste and recycling programmes in campuses. This activity was under Stewardship Ontario. On April 15, 2004, Stewardship Ontario sent a letter to all Ontario universities advising them of their obligation to pay fees to Stewardship Ontario based on the weight of printed materials they mailed off-campus in 2002/2003. As a result Waterloo University tried to reduce the usage of paper after applying the waste reduction and recycling programmes.

Kansas University also tried to reduce their paper usage by reducing the margin from 1.25” to 0.75”. By reducing the margin this university reduced the amount of paper printed by 4.75%. The amount of paper used can be reduced by printing on both sides.

UM may also apply the similar methods to reduce waste paper generation. UM can also reduce the generation of waste paper by centralizing a recycling programme and enforcing a policy on recycling in the campus. Nowadays, it is compulsory for students to submit 3 series of soft copy of the thesis or Dissertation to the Dean’s office of each Faculty. They should also submit a CD of the dissertation, however, in the Library web site it is not possible to get all the dissertation and the thesis that submitted before. This

means UM can reduced the no of copy the required from the students s a final submission and try to make online all the thesis in the Library web site. The advantage of this activity could be save more paper and natural resources and the other hand for the other students around the world may get these information that students from UM gathered.

5.2.2 Training and teaching of cleaners and staff

This can be done to increase the knowledge of staff, students and cleaners to increase the recycling of paper in UM. As mentioned before technologies and logistics are not alone enough while combination these two with increasing of the knowledge may lead UM to reduce the usage of paper.

5.2.3 Techniques

Different simple technique can reduce the usage of paper. These techniques are as follow:

Distribute memos via email, share internal documents via internet, book mark WebPages instead of printing them out, use electronic business forms, store office records on CD-ROMs, adjust page settings (margins, line spacing and font size), print letterhead directly from staff computers, replace fax cover sheets with stick -on -label, send and receive faxes via personal computers to avoid printing, print two or more pages per side, eliminate cover or divider pages and use scrap paper for drafts or note paper.

5.2.4 Using recycle paper instead of using virgin paper

As discussed earlier in Chapter two, paper manufacturing requires huge inputs of chemicals , energy and water. By using the farmed tree like bamboo, kanaf and bagase there is a chance to reducing the environmental impact.