

**THÈME 05 : Economie agropastorale et rurale.**

**Titre de la présentation affichée :**

**The prospects of the usability of mill waste in paper production**

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**Résumé**

The paper industry in Algeria is highly extroverted and depends on imported raw materials and paper, and a low percentage of paper recycling. As for the management of semolina waste (wheat bran) it turns out that they are supplied to feed the cattle in large part. So it can compensate for livestock feed with other feed and used wheat bran in the production of paper pulp and this pulp contains 17% wheat bran. Paper industries such as Tonic and others rely on waste collection and recycling. They sometimes resort to imports for their raw material with, in addition, difficulties of water and energy supply. This gives an excessive additional cost to the product when it leaves the factory. Whether it comes from imported raw materials or recycled paper, these two materials are already insufficient and their cost is exorbitant, but if we add to them preparations of wheat bran origin which, once available, will certainly allow the revival of the sector in good conditions of technology and profitability. Consequently the survival of the paper industry in Algeria inevitably requires the search for other resources. In this context, this alternative of producing paper from flour mill residues (including wheat bran) is a better solution for the sustainable development. This paper, sometimes called “ Paper Crush”, has the particularity of being composed of 20% wheat residues unfit for human consumption, which replaces cellulose and recycled paper. Moreover, several studies have revealed in particular that paper made from wheat fibers has a lower environmental impact, particularly in terms of the use of non-renewable energy, greenhouse gas emissions, waste water and water acidification. This work aims to explore the ability of semolina factories in the region to provide a raw material through its scrap for the production of paper.

**Mots-clés :** Paper pulp; Crush paper; wheat bran; milling; cellulose