

Application of agro-industrial biomasses as a strategy to increase the sustainable bioeconomy in the Amazon

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INTRODUCTION & AIM

Biomasses from agro-industrial practices in the Amazon have generated significant inputs in the last decade for the development of projects and the extension of more sustainable production chains, based on the results of research, on a laboratory scale, pilot scales and in rapid expansion in industrial scaling. The rise in the use of biomass from raw materials of the so-called superfruits are notable examples: açai (*Euterpe oleracea* Mart.), Brazil nut (*Bertholletia excelsa* HBK), pupunha (*Bactris gasipaes* Kunth), tucumã (*Astrocaryum aculeatum*) and buriti (*Mauritia flexuosa*) are examples of great prominence in the region's trade balance, contributing significantly to the import of products and by-products from Brazil (1,2)

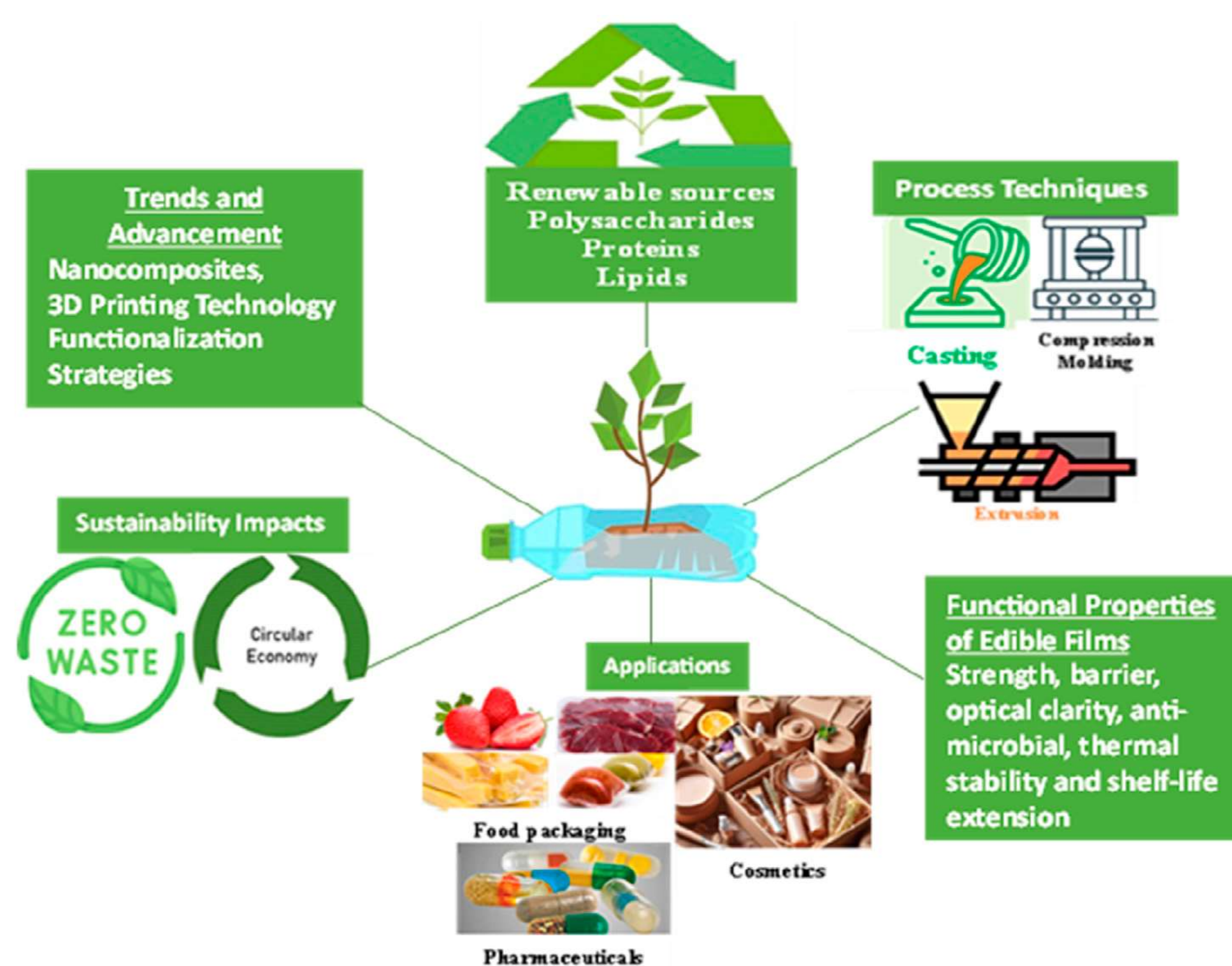
METHOD

In view of the above, this research aims to present the nutritional, functional and technological properties of these biomasses as an element of industrial innovation in the use of isolated constituents in various segments of the food, pharmaceutical, dermocosmetic and packaging industries.

RESULTS & DISCUSSION

The data show that research has been guided and deepened in protein, fibrous and starch-based biopolymers contained in these biomasses, with greater emphasis on investigations in isolation and applications of bioactive compounds and starches and fibers

in the development of films and packaging with good resistance properties and high environmental biodegradability (Fig. 1)



Fonte: 3. Olawade DB, Wada OZ and Ige AO (2024)

CONCLUSION

The application of certain biomasses is economically viable as food coatings, acting in synergy with the application of technologies and the increase of the sustainable circular bioeconomy in the Amazon, combining technical-economic and environmental development in the most diverse industrial segments.

FUTURE WORK / REFERENCES

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