

# **INCORPORATING PRIVATE - PUBLIC RELATIONSHIP INTO FOOD TECHNOLOGY DEVELOPMENT: CREATING ADDED VALUE TO “ALOE VERA” PRODUCT**

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## **INTRODUCTION**

Agricultural Technology Department is a Study Program under Faculty of Agricultural Engineering, Bogor Agricultural University (IPB). Processing Technology and Management Science are two main streamlines that are developed in this department. As part of the university, department has three main tasks to be carried out which are education, research and community services.

Initially the ‘Aloe Vera’ research was developed as a basic research to identify basic characteristics of the plant called ‘Aloe Vera’ (Lidah Buaya in Indonesian language). This was done as part of our community service activity and the idea behind this research was triggered by the changing of people consumption pattern lately (healthy and natural food is becoming popular) and our curiosity regarding the wide range of ‘aloe vera’ utilization such as: used as raw material for medicines and cosmetics. The research showed that ‘Aloe Vera’ has so many nutritious values and this answered people curiosity. ‘Aloe Vera’ has many elements that are needed by human body such as vitamins (A, B1, B2, B6, C and E), Choline, Inositol, Folic Acid, Minerals and Enzymes, all elements are useful for human metabolism, stabilizing blood cholesterol, slowing down from getting old, strengthening cell and body tissues and alleviating fatigue. Some researchers added to the finding for instance, Hartono (1992) found out that ‘aloe vera’ or miracle plant has a very high capability to absorb inside skin tissue therefore it is good as raw material for cosmetics. Suryowidodo (1988), pointed out that ‘aloe vera’ has low calorie values (4 kkal/100g gel) then it is popular as a diet product especially for those who have weight problem.

Despite of all good components that ‘aloe vera’ has especially regarding the nutritious values and the wide range of its utilization, it is almost no economical value at all. Then the research results had attracted interest of private sector in developing further research regarding the use of ‘aloe vera’ in commercial scale of industry and on how to create added economical value to ‘aloe vera’.

PT. Nirmas Utama Indonesia is one of the private companies majoring on food processing (agricultural-based industry) that produce healthy food interested in developing an integrated research on ‘aloe vera’. At the beginning the company was only a producer and supplier of raw materials for other food processing companies (mostly serving export market such as Taiwan and Japan) their main product was called *Nata de Coco* (made from coconut water). However, in 1994 Japan - the biggest market of the company - stopped importing *Nata de Coco* due to their market maturity. This condition caused some losses to the company, profit target can not be reached, idle capacity become a burden for the

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company, then the management decided that alternative product will be the solution to overcome this situation.

The above elaboration was the background lied behind our year collaboration, the department needs to extend its community services become “partner” for the industry and industry need continues research for their business development, our department is treated as their Research and Development Division. Since then the company has developed their image to become the most innovative company (market leader for innovative healthy and natural food), product differentiation is one of their main market strategies.

### **OBJECTIVES**

The objectives of the study are divided into two categories: general objective and specific objective.

**General objectives** of this activity are to revitalize the existing relationship between public organization/institution – in this case the department of Agricultural Technology (IPB) – and private organizations/institutions, and to build mutually beneficial commercial partnerships among them.

**Specific objectives** are to manage post harvest handling of ‘aloe vera’ produce and to create its value added.

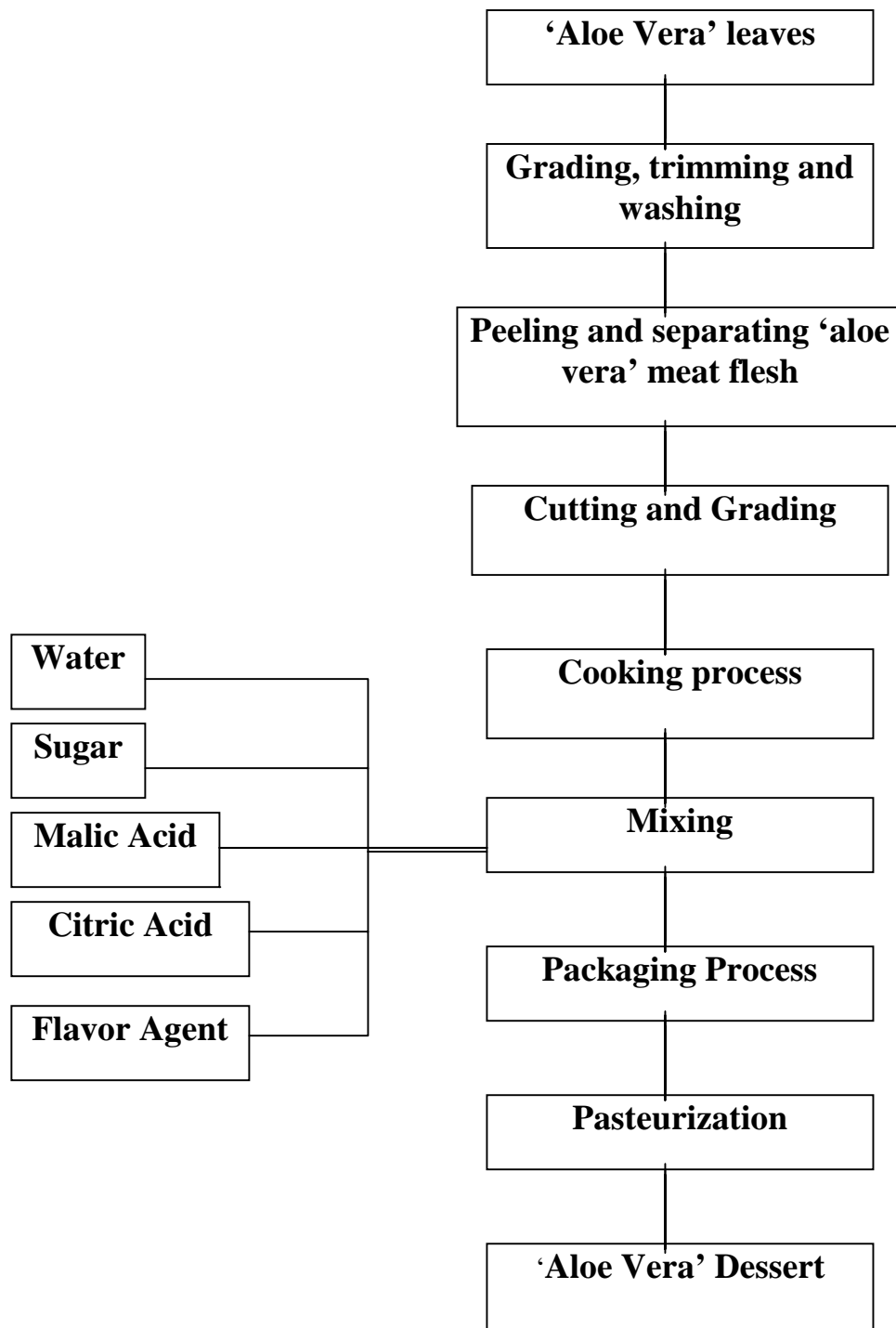
### **‘ALOE VERA’ DESSERT PRODUCT**

*‘Aloe Vera’ Dessert* was launched commercially and successfully for the first time in Mei 1999, the key success of this launching was timing and product’s uniqueness, the changing pattern of consumption of Indonesian consumers (healthy snack is in demand), the ‘Aloe Vera’ Dessert can answer consumers need. Our department’s involvement now is being extended not only in the technical aspect such as processing but also in the managerial aspect especially marketing aspect.

*‘Aloe Vera’ Dessert* produced by PT. Nirmas Utama Indonesia known as *‘Aloe Vera’ Dessert* INACO is marketed through two different market - 40% for local market and 60% for export market mostly Taiwan and Japan. The average monthly production of ‘Aloe Vera’ dessert is 5000 boxes ‘aloe vera’ product in cup (12 cup/box) and 4000 boxes ‘aloe vera’ product in stanpouch (24 standpouch/box).

Basically, the ‘aloe’ dessert’s processing process is simple (sorting/grading and washing, peeling, cutting, cooking in syrup, adding flavor, packing, and pasteurizing). The most difficult part was how to remove the ‘aloe’ original taste and how to market them -‘aloe’ is more popular as a material for cosmetics produce purposes not as an edible produce.

The following flow chart shows the processing process of ‘Aloe Vera’ Dessert developed and modified by PT. Nirmas Utama Indonesia:



## **PROCESSING OF 'ALOE VERA' DESSERT**

(PT. Nirmas Utama Indonesia, 2001)

### **PUBLIC – PRIVATE PARTNERSHIPS**

Initial and basic ideas for doing the research on 'Aloe vera' came from individual initiative through student/alumni – supervisor relationships. Then the size and the scope of the study were developed and skilled up into the industrial and commercial level. To achieve integrated and continuous researches, institutional partnerships is needed and written agreement is also being part of it.

By adopting partnerships principles from existing literature we constructed the type of partnerships into a mutually beneficial commercial partnership. These partnerships yield major benefit for both parties such as improved quality, for instance, university improved quality of research and know-how, firm improved quality of product, shorter product development cycles increased market share, rapid improvement in logistics facilitated by candid information exchange and better coordination. This type of partnership differs from project-based partnership in which two organizations may work toward a common goal but latter dissolve the association after achieving the goal, in other word, sustainability is not part of it.

What do we learn by incorporating private – public partnerships? Study has noted some key recurring characteristics of successful partnerships: in these close relationships knowledge-exchange capabilities plays very important role because the two partners exchange information regularly, through reports (e.g. sharing costs and data); mutual trust is crucial to reassuring organization that information shared with partner will not be used against them; and longer –term commitment to the partnership encourages parties to invest in further improvement of the joint chain to mutual advantages (ensure ongoing improvement). It has observed as well that there are two kinds of successful relationships: high requirements-high capabilities and low requirement-low capabilities. There are also two paths to failure: under-designed relationships and over-designed relationships, these kinds of relationship are not workable and costly.

The findings suggest that designing or redesigning relationships consists of three analytical steps: (1) the strategic selection of relational types to match the external condition given by the product, the technology, and the market; (2) the identification of an appropriate management profile for each type of relational design; and (3) matching the design of the relationship, which could be over- or under-designed, to the desired management profile. Effective resource management yield from public – private partnerships require choosing a type of relationships appropriate to product and market conditions and adapting management practices to that relationships.

Until now the processing aspects related to the producing of 'aloe vera' healthy food is consider sufficient the research concentration now is being focused to observe more on the

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marketing aspects, such as developing marketing strategies to capture smart markets, analyzing 'Aloe Vera food product positioning' and analyzing buyer–supplier relationships.

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