



HIS MAJESTY

# the ROCOTO PEPPER



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the **ROCOTO PEPPER**

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FONDO  
EDITORIAL

## **HIS MAJESTY THE ROCOTO PEPPER**

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# Foreword



**T**he demand for food and agricultural products is undergoing unprecedented change. Income growth, urbanization and the entrance of women into the job market have led to population growth and increased needs for highly nutritious, processed and prepared foods. Meanwhile, commerce, communications and tourism have been accelerating the shift to healthy eating patterns and a growing interest in native foods. The nature and scope of the versatile structure of this demand for agro-food offers exceptional opportunities for diversification and value-added in the agricultural industry, particularly in the developing countries.

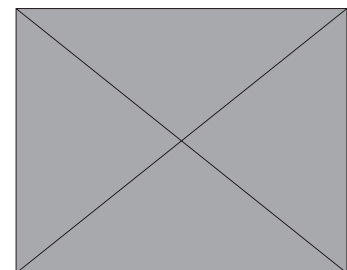
We all know that agribusinesses form part of the manufacturing industry where value is added to raw ingredients through the operational circuits of product handling, packaging, processing, transport and distribution and are effective engines of economic growth. Moreover, it is essential that we develop competitive agribusinesses to generate job opportunities for the population and improve income levels in rural areas. There are clear signs that agribusinesses have a significant global impact on poverty reduction among both urban and rural populations.

Thus, agribusinesses have powerful multiplier effects in terms of job creation and value addition. For example, the production chain of a new Peruvian aji pepper processing plant creates jobs at its own processing plant, as well as in seed production, seedling planting, transplants, and farming and harvest activities in rural areas. Following selection and packing according to fruit size, shape and condition, aji peppers may be shipped to a processing plant or directly to the market place.

The increase in international demand, primarily from colonies of Peruvians residing abroad, and the boom of our Peruvian cuisine, stimulates sales of aji peppers, in fresh, dry or processed form. Beyond the ties with its fresh ingredient suppliers and its buyers, the impact on a wide array of auxiliary services and support activities in secondary and tertiary economic sectors will also be favorable. However, many developing countries, Peru among them, have yet to understand all the potential that agribusinesses have as engines of economic growth.

Fighting poverty requires bringing development and economic growth to rural areas. Agribusinesses are part of the answer to this challenge, despite the risks they present in terms of equity, sustainability and inclusion. There is the danger that adding or attracting value may end up concentrated in one or few participants in the chain, to the detriment of the others.

Agri-business will only be sustainable if competitive in terms of costs, prices, operating efficiency and product supply, and only when the compensation received by the farmers is profitable for them. Establishing and maintaining competitiveness constitutes a unique challenge for small and medium sized agribusinesses and for the small farmers who grow rocoto peppers, particularly in areas such as Pasco and Puno. Even though agribusinesses have the potential to operate profitably with agricultural products, the



**Raúl Diez Canseco Terry**

Presidente Fundador  
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need to ensure competitiveness favors those farmers who are able to deliver products of better quality and in greater quantity.

Another example is this. One of the problems faced by aji pepper producers is the informal nature of the seed market. A certified aji pepper seed that meets the demands of the National Institute of Agricultural Research is non-existent, and for this reason, there is no assurance to the producer that the product is completely free of bacteria and viruses. A formidable contribution to the sustainability of a flagship product of our national cuisine would be a large national capsicum germplasm bank, where each of the varieties produced in each region at different elevations and climates is properly recorded and stored.

As smaller, resource-poor farmers are excluded from supply chains, the socio-economic benefits of agro-industries are potentially reduced. Therefore, it is essential for us to have policies and strategies that promote agribusiness while taking into account the issues of competitiveness, equity and inclusion.

This publication is the result of a research project about the rocoto pepper and we ask that you pay special attention to the valuable contribution that nutrition can make to gastronomy, pharmacology and the agro-business sector. While Peru has a broad range of aji peppers – owing to its wider variety of ecological areas, it lacks the systematic research that examines applications this product might have in different areas. It is also not promoted as a flagship product or has it received any major investment.

Internationally, the demand for specialized products is expanding and Peruvian hot peppers are regarded with an air of gourmet in sauces, cookies and delicatessen products. In addition, you can buy analgesic creams where the active ingredient is Capsaicin, which relieves pain produced by neuralgias, such as rheumatoid arthritis and multiple sclerosis. There are research studies that associate capsaicin to improvements in gastric problems and hypertension and the reduction of cancer cell growth. Finally, in the beauty and cosmetic industry, some people suggest that capsaicin is a more effective option than Botox. Botox.

Herein lies the importance of this publication that includes a new study by USIL that combines two concepts: nutrition and gastronomy, both synonyms of balance and well-being. It recommends agribusiness as a way to enhance the nutritional value of native food products such as the rocoto pepper, and strengthen the competitiveness of the gastronomic value chain, while protecting the environment and biodiversity and promoting economic growth.















# Prologue

**A** year ago, the United Nations approved the 2030 Agenda for Sustainable Development. This is an action plan for people, planet and prosperity. It seeks to bring the planet back into balance by making it a place that is more just, free of poverty and hunger, more healthy, and holds equal opportunities for everyone.

The 2030 Agenda is the greatest challenge ever faced by man to eradicate poverty. This is a common and universal undertaking. Some of these big goals are to eliminate hunger and achieve food security, ensure a healthy lifestyle and quality education, achieve gender equality and take drastic measures against climate change. However, the attainment of these goals calls for the combined efforts of all. This requires the participation of governments, combined with civil society, business, social organizations and certainly universities.

Approaching the celebration of its 50th anniversary, Corporación Educativa San Ignacio de Loyola is committed to the implementation of this Agenda. When I consider everything that we have accomplished until now, about the number of professionals that we have educated and who perform competitively in Peru and around the world today I like to think of a tree: the tree of life.

Over the past half century of academic life our roots have always and continue to be embedded in entrepreneurship, the force that has the capacity to transform will into action and action into results. Our philosophy of interlinking Education with the Health Sciences is the strong trunk within which we establish our commitment to the Life Sciences. It is in this context that I contemplate and visualize the living branches of this magnificent tree:

Agro Industrial Engineering. Strengthening our native products, protecting their organic, natural farming process with respect for the environment.

Food Industries. Promoting the value added transformation of our products and facilitating their distribution in new markets.

Gastronomy, Organizing and highlighting the potential of our own domestic creole and regional cuisines.

Nutrition. Because we are what we eat, and our food contains everything we need, not to prolong our lives, but to have better quality of life.



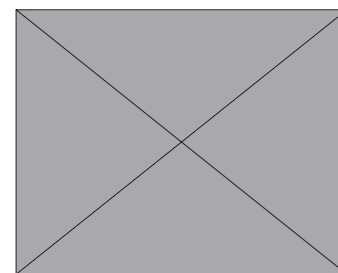
Medicine with a functional and preventive approach. Our most recent branch, to which from here forward we will devote all of our efforts. In 2018, we will have a new academic program in Medicine that views humans as holistic beings: body, mind and spirit, in balance with their social and environmental settings.

The Nation has made a great effort to improve the quality of Education. We built schools, improved teacher salaries, but our children are still falling behind. Can you imagine what results the students could obtain in Reading Comprehension and Mathematical Reasoning on the PISA exam if we paid more attention to their diet and nutrition?

Food is of vital importance. A healthy, nutritious and balanced diet will change the measurement ratios of the Educational quality. For this reason, the Food and Agriculture Organization of the United Nations (FAO) recognizes education in nutrition as a powerful strategy to improve food security programs across the world. The implementation of educational intervention initiatives that empower citizens to eat properly, including nutritious, fresh and locally produced foods is becoming increasingly necessary.

At USIL, we are on this path. As a contribution to nutritional education in Peru and by publishing this book, Universidad San Ignacio de Loyola aims to promote a life style of healthy, nutritious and delicious food consumption. On this occasion, we wish to cast a spotlight on the rocoto pepper, an emblematic product of our country's food basket.

Over the coming years, the primary goal of the National Government should be the promotion of adequately nutritious diets for all Peruvians aimed at improving the health and welfare of the entire population along with the promotion of social and economic development.



**Luciana de la  
Fuente de Diez Canseco**

Executive President  
Universidad San Ignacio de Loyola













# Introduction



**T**he book entitled His Majesty the Rocoto Pepper, a treasure of Arequipa is a true remembrance that takes us back to rediscover the roots that gave rise to our cultural diversity, our customs and traditions. When we began researching the origin of the rocoto pepper, it became inevitable that we would discover the link to our ancient Peruvians and their efforts to domesticate food products that nature provided for their own use and for their communities.

Particularly, this history has an influence on the process that gave birth to Arequipa's identity by way of gastronomy, with the rocoto pepper as the star ingredient. Let us not forget that a people without the memory of all the efforts and contributions made to create their own distinctive profile is a people without an identity. It is a people uncertain about which path to take to make their interests and aspirations become reality.

The rocoto pepper has thus evolved into a product that accomplished much more than that of imparting flavor to the exquisiteness of the different typical dishes of the southern region of Peru, one of the most progressive cuisines in Peru's national territory. It also contributes to the good health of those who consume it. This is a scientifically proven fact that makes rocoto a unique and peerless pepper.

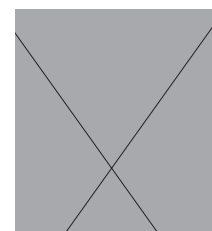
The capacity of rocoto to motivate families to gather in their homes and attract diners to different eateries in search of good cooking and pleasant get-togethers serves to elevate the level of the rocoto pepper's qualities as a culinary product par excellence even further.

The first and second chapter of this book are devoted to discussing the socio-cultural aspects of the city of Arequipa and its traditions, so closely linked to the consumption of rocoto. In addition, these chapters introduce a macroeconomic perspective of the agro-industrial activity of this product. The third chapter highlights the wonderful substances that the rocoto contains as a natural product including scientific studies about capsaicin, an active ingredient with a whole spectrum of applications in the fields of nutrition, gastronomy, pharmacology and beauty.

The fourth chapter examines the contribution of the rocoto pepper in the field of gastronomy. This chapter adeptly teaches the reader traditional ways to consume this product in many dishes that have made Arequipan cuisine emblematic for Peru.

The last chapter is a compilation of the results of the gastronomy contest, which was held to keep the consumption of rocoto current through the creation of innovative recipes. Among the recipes exhibited, the traditional stuffed rocoto was present alongside some of the most prominent winning dishes created by young chefs.

With the publication of this book, USIL is proud to renew its commitment to health, excellent nutrition and to provide an attractive overview of one segment of the wealth of Peru's cuisine and food products. This edition forms part of a collection of publications aimed at fostering a healthy lifestyle. In addition, the book is a tribute to the rocoto pepper and all those who have placed it at the center of their lives to enjoy the pleasure of good food and good living.



**Dra. Teresa Blanco  
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