



2020 NCHU Sustainability Report (Condensed version)

2020

NCHU

**Sustainability Report
(Condensed Version)**

CONTENTS

PART 1	01
Brief History of NCHU	
PART 2	02
Sustainability	
PART 3	04
Academic Research & Industry Collaboration	
PART 4	05
Scholarships & Grants	
PART 5	05
Gender Equality	
PART 6	06
Social Participation	
PART 7	12
Environmental Governance	
PART 8	14
Assurance Report	



Part 1: Brief History of NCHU

Established in 1919, National Chung Hsing University (NCHU) is the third largest research-intensive national university in Taiwan.

Part 1 Brief History of NCHU

1. Chronicle

- 1919 ■ Advanced Academy of Agronomy and Forestry
- 1928 ■ A Special Department affiliated to Taihoku Imperial University (now National Taiwan University)
- 1943 ■ Taichung College of Agronomy and Forestry (located in Taichung)
- 1946 ■ Taiwan Provincial College of Agriculture
- 1961 ■ Taiwan Provincial Chung Hsing University
- 1971 ■ Present National Chung Hsing University

2. Motto

Sincerity, Simplicity, Advancement, Diligence

3. Organizational Structure & Campus Size

- College
 - 9 colleges & International College of Innovation and Industry Liaison
- Affiliated Schools
 - The Affiliated Senior High School of National Chung Hsing University
 - The Affiliated Taichung Agricultural Vocational High School of National Chung Hsing University
- Campus Size and Other Locations
 - Total Campus Area: **8,360** hectares
 - Main Campus Area: South Taichung City, **53** hectares



4. Number of Faculty and Students

9,226 Undergraduate Students

5,830 Graduate Students

1,136 Doctoral Students

38 Teaching Assistant

770 Professors (Researchers)

251 Vocational Workers and Guards

381 Contract Coordinators

589 Project Assistants

119 Post-doctoral Research Fellows

19.35 Pupil-Teacher Ratio (2019 Fall-2020 Spring)

Part 2: Sustainability

Highlighting NCHU's key achievements and implements in school governance, social participation, and environmental governance.

Part 2 Sustainability

1. School Governance



46th globally in 2019-2020 THE Impact Ranking, SDG13 - Environmental Change



Top 1% of the world: Outstanding performance in 10 major fields of Essential Science Indicators (ESI)



No.1 in Taiwan receiving highest number of awards: Coaching and training start-up teams

2. Social Participation



Ministry of Education's USR EXPO
2019 Award for Most Active Award /
2020 Award for Selected Topic :
"Stray LOHAS": Stray Animals Reduction and Fulfilment of Welfare Project



Ministry of Education's USR ONLINE EXPO
2020 Award for Most Popular :
Community Empowerment Project for Qingliu Aboriginal Village: Energy, Local Industry, and Cultural Retrieval



Part 2: Sustainability

Highlighting NCHU's key achievements and implements in school governance, social participation, and environmental governance.

3. Environmental Governance



9th in Taiwan (**102nd** in the world)
in UI GreenMetric World University Ranking



98.87% green procurement



99% of official documents digitalized, saving
3.39 million sheets of paper



1st university in Taiwan certified for personal
data protection



1st Plant Teaching Hospital in Taiwan:

- >100** counselling sessions
- Assisting farmers with professional pest and disease diagnosis



Part 3: Academic Research & Industry Collaboration

Facing the global current of sustainability - induced developments and challenges, NCHU constantly extends its influence via outstanding academic performance on research and industry-academia collaboration.

Part 3 Academic Research & Industry Collaboration



1. Research Projects

93 Sustainability-Related Research Projects

1,334 Journal Articles on SCI & SSCI and A&HCI

261 Open Access Journal Articles

1,522 Scopus Articles published

2. Industry-Academia Collaboration

● Patents Granted & Derivative Income (2001-2020)

> **1,400** patents granted
> NT\$ **200** million

● Educational Projects & Funding

1,497 educational projects
NT\$ **1.9** billion

● Industry-Academia Collaboration Projects & Funding

175 Industry-Academia collaboration projects
NT\$ **354** million

● Industry-Academia Alliances & Funding

130 Industry-Academia Alliances
NT\$ **5.47** million

Part 4: Scholarships & Grants

The scholarship, grants, and support for the disadvantaged students provided by NCHU.

Part 4 Scholarships & Grants

1. Scholarships / Grants

● Total Scholarships / Grants:
NT\$**127.13** million

● Fundraising:
NT\$**7.13** million

● NCHU:
NT\$**120** million

2. Support for Disadvantaged Students

● Hsing Yi Admission :

47 students admitted.

Increase the chance for financially disadvantaged students to attend NCHU.

● Hsing Yi Scholarship :

◎ Fundraising :

NT\$**400,000** for each admitted student.

◎ Accumulated donations :

> NT\$**11.38** million. (2017-2020)

◎ Cumulative grants :

> NT\$**6.24** million granted to **128** students.
(2017-2020)

Part 5: Gender Equality

Below are the gender ratio of professors/supervisors, and the number of events and courses held at NCHU to promote gender equality consciousness.

Part 5 Gender Equality



22% of scholars/professors are female

18% of supervisors are female

38 events to promote gender equality consciousness

3,634 participants. (2019 Fall – 2020 Spring)

14 courses related to gender equality

839 participants. (2019 Fall – 2020 Spring)

Part 6: Social Participation

NCHU created an *USR Developmental Blueprint* to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.

Part 6 Social Participation

NCHU USR Developmental Blueprint



One-Step Food Inspection: Secure People's Happiness and Life

>5,000 pieces examined per year for heavy metals and hazardous substances.

>10,300 pieces examined in 5 years for agricultural pesticide residue.

>341 Traceable Agricultural Products (TAP)

6,780-hectare farmland are certified to produce TAP.



Agriculture Pioneer Creating Smart Farming Town

1st team to Africa, Thailand and Arab, sharing farming technology abroad and cultivating diplomatic relations.

17 rare Taiwan native chicken species are preserved in NCHU Native Chicken Conservation Center preserves.



Part 6: Social Participation

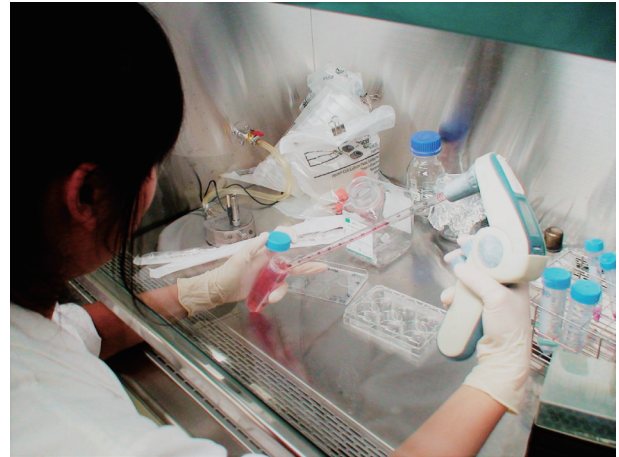
NCHU created an **USR Developmental Blueprint** to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.



Build Health Prevention System to Strengthen Medical Well-being

Founded "**AI Precision Medicine League**" and connected Taiwan's most well-rounded platform A-Pen.

Develop new drugs for Osteoporosis and Alzheimer's disease, **building up Health Prevention System**.



Education Right for Everyone

>3,000 teachers have been trained in NCHU Center of Teacher Education.

>2,000 visits to 2020 "Scientists' Secret Base" Science Exhibition.

>4,000 farmers given advice in "Farmer Talk" hosted by NCHU.

Part 6: Social Participation

NCHU created an *USR Developmental Blueprint* to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.



Develop Carbon Negative Technology and Transform Sustainable Energy

4.6 hectares increased in planting area with **>7,000** strains of native trees in NCHU three Experimental Forest Stations, Xinhua, Dongshi and Hui-Sun. (2016-2020)



Successful Examples of Start-ups Established by Teachers and Students

NT\$ 22 million Angel Fund.

52 start-ups were established. (2015-2020)

NT\$ 990 million in capital.

274 start-up teams.

1,719 people have received start-up training.



Part 6: Social Participation

NCHU created an *USR Developmental Blueprint* to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.



Collection of History, Literature, and the Wildlife Scenery: Promoting the Cultural Versatility

120,000 insect specimens around the world are in NCHU Museum of Entomology.



Disaster-Prevention Technology and Rehabilitation: Co-create Sustainable Land

1st full-scale Soil and Sand Flow Test Field in the world in Landao Creek.

Utilize drones and big data to calculate and arrange farmers' harvest process, **maximizing farmers' income.**

24-hour monitoring and forecasting air pollution.

Part 6: Social Participation

NCHU created an *USR Developmental Blueprint* to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.



Sowing the Seed of Hope: Spreading the Concept of Plant Medicine

Plant doctors protect Greens:

>100 counseling sessions.

>500 old trees rescued in Taiwan.



Preserving Biodiversity and Implementing Ecological Conservation



>2,000 turtles sheltered in NCHU
"Yellow-Margined Box Turtle Shelter Center".

12 years working on Taiwan Landlocked Masu
Salmon Restoration Project.

<500 (2001) → **>10,000** (2019) Taiwan Landlocked
Masu Salmon population increased.

Part 6: Social Participation

NCHU created an *USR Developmental Blueprint* to apply its academic expertise to social service. This chapter excerpts 12 NCHU USR highlights.



The Foundation of Taiwanese Veterinary, The Caregiver of Human and Animal Diseases



>850 poultry farms are tracked and collected test specimen to monitor bird flu yearly.

>1,000 free sterilization surgery for stray dogs and cats were performed monthly.

53% of stray animals in Taichung City decreased. (2015-2018)



Fulfilling World Citizens' Duty, Building Up a Blissful & International Perspective

5 countries including Nepal, the Philippines, Sri Lanka, Myanmar, and Malaysia host NCHU student volunteers.

68 students have joined.



Part 7: Environmental Governance

Environmental Governance: In pursuit of sustainability, NCHU actively solve various problems and continuously enhance the working environment and safety.

Part 7 Environmental Governance



5
Certified Green
Buildings



6.2%
Water Consumption
Decreased Comparing
with 2019



5 Sets
Rooftop Photovoltaic
Equipment



54%
Indoor Lighting
Energy Saved



740.79 Kw

NCHU Green Buildings

Area	Building Name	Certificate Grading	Academic Year
Campus	Language Center	Qualified	94
	Social Science and Management Building	Qualified	97
	Humanities Building	Qualified	104
	Food Science and Biotechnology Building	Qualified	108
	Women's Dorm-Cheng Xuan	Qualified	108

Part 7: Environmental Governance

Environmental Governance: In pursuit of sustainability, NCHU actively solve various problems and continuously enhance the working environment and safety.



Part 8

Assurance Report



安永聯合會計師事務所

40341 台中市民權路239號7樓
7F, No. 239, Minquan Road
Taichung City, Taiwan, R.O.C.
Tel: 886 4 2305 5500
Fax: 886 4 2305 5577
www.ey.com/taiwan

Assurance Report of Independent Auditors

To: National Chung Hsing University

1. Scope

We have been engaged by National Chung Hsing University to perform a limited assurance engagement in relation to and report on selected sustainability performance indicators included in National Chung Hsing University's 2020 Sustainability Report ("the Sustainability Report").

Regarding the sustainability performance indicators selected by National Chung Hsing University and their applicable criteria, please refer to Appendix 5 of the Report.

Management Responsibility

National Chung Hsing University is responsible for the preparation of the Sustainability Report in accordance with adequate criteria, including referencing to Global Reporting Initiatives Standards ("GRI Standards") issued by Global Reporting Initiative (GRI), and for the design, execution and maintenance of internal controls in regard with report preparation to support the collection and presentation of the Sustainability Report.

Independent Auditor's Responsibility

Our responsibility is to plan and perform limited assurance engagement in accordance with *Assurance Engagements No.1 – "Assurance Engagements Other than Audits or Reviews of Historical Financial Information"* issued by the Accounting Research and Development Foundation.

2. Assurance

The procedures performed in limited assurance engagement vary in nature and timing are less in extent than for a reasonable assurance engagement so that the level of assurance is substantially lower than reasonable assurance engagement. While we considered the effectiveness of National Chung Hsing University's internal controls when determining the nature and extent of procedures, our review was not designed to provide assurance on internal controls.

To conclude for limited assurance, our procedures performed included:

- Interviewing with National Chung Hsing University's management and personnel to understand the National Chung Hsing University's implementation of overall social responsibility and reporting process;



- Performing analytical procedures on selected sustainability performance indicators; gathering and checking other supporting documentation and management information obtained; testing on sample basis if necessary.
- Reading National Chung Hsing University's Sustainability Report to ensure the implementation of overall social responsibility and reporting process is consistent with our understanding.

3. Limitations

Non-financial information contained within the Sustainability Report are subject to measurement uncertainties. The selection of different measurement techniques can result in materially different measurement. Also, assurance engagements are based on selective testing of information being examined, and it is not possible to detect all of the existing material misstatements whether resulting from fraud or error.

4. Quality and Independence

We are in conformity with *Statements of Auditing Standard No. 46 "Quality Control for Public Accounting Firms"* to establish and maintain a sound system of quality control, including code of professional ethics, professional standards and those written policies and procedures in applicable regulations. We are also in conformity with related independence and other ethics requirements in *The Norm of Professional Ethics*, which basic principles are integrity, objectivity, professional competence and due care and professional behavior.

5. Conclusion

Based on our procedures and obtained evidence, nothing has come our attention that causes us to believe that any material modifications or adjustments should be made to the selected sustainability indicators in accordance with applicable criteria.

Ernst & Young

Chen, Ming Hung

June 17, 2021

Notice to Readers

The reader is advised that the assurance report has been prepared originally in Chinese. In the event of a conflict between the assurance report and the original Chinese version or difference in interpretation between the two versions, the Chinese language assurance report shall prevail.

NCHU



This Publication is Co-Edited by the Office of
University Social Responsibility and Office of
International Affairs, NCHU.



Address: 145 Xingda Rd. South Dist.,
Taichung City 402, Taiwan (R.O.C.)
Mobile: +886-4-22840125
e-mail: usroffice@nchu.edu.tw

