

Online training series
Nutrition Goes To School (NGTS)

ຜົນປະໂຫຍດຂອງສວນໂຮງຮຽນ ແລະ ການນຳໃຊ້ຂອງມັນ (Benefits of School Garden and its applications)

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ຮອງຫົວໜ້າພາກວິຊາ ເສດຖະກິດຊົນນະບົດ ແລະ ເຕັກໂນໂລຊີ
ອາຫານ, ຄະນະກະເສດສາດ, ມະຫາວິທະຍາໄລແຫ່ງຊາດ

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Pre-learning activities

Lesson learning outcomes

After completing this lesson, the students will be able to: ຫຼັງຈາກຮຽນຈົບບົດຮຽນນີ້ແລ້ວ, ນັກຮຽນຈະສາມາດ:

- define the school garden for nutrition at school ໃຫ້ຄຳນິຍາມ ສວນໂຮງຮຽນເພື່ອໂພຊະນາການ
- Understand concept and principle that will be able to apply agroecological practices at school for nutrition ເຂົ້າໃຈແນວຄວາມຄິດ ແລະ ຫຼັກການທີ່ຈະສາມາດນຳໃຊ້ການປະຕິບັດດ້ານນິເວດ ກະສິກຳຢູ່ໃນໂຮງຮຽນສຳລັບໂພຊະນາການ

Lesson overviews (this is the outline of this lesson)

In this lesson, learners will learn about:

1. ຜົນປະໂຫຍດຂອງສວນໂຮງຮຽນ (Benefits of school garden)
2. ການນຳໃຊ້ສວນໂຮງຮຽນໃນການສຶກສາໂພຊະນາການ (Application of school garden in nutrition education)

Keywords

Keywords	Definition
Academic Enhancement	<p>School gardens provide hands-on learning opportunities that can enhance students' understanding of science, math, language arts, and social studies concepts</p> <p>ສວນຂອງໂຮງຮຽນໃຫ້ໂອກາດການຮຽນຮູ້ທີ່ສາມາດເສີມສ້າງຄວາມເຂົ້າໃຈຂອງນັກຮຽນກ່ຽວກັບວິທະຍາສາດ, ຄະນິດສາດ, ສິລະປະພາສາ ແລະ ແນວຄວາມຄິດການສຶກສາສັງຄົມ</p>
Life Skills Development	<p>Learning about planning, budgeting, and problem-solving through gardening</p> <p>ການຮຽນຮູ້ກ່ຽວກັບການວາງແຜນ, ງົບປະມານ, ແລະ ການແກ້ໄຂບັນຫາໂດຍຜ່ານການເຮັດສວນ</p>
Cultural Diversity	<p>Growing culturally relevant plants and learning about different food traditions</p> <p>ການປູກພືດທີ່ກ່ຽວຂ້ອງທາງດ້ານວັດທະນະທຳແລະການຮຽນຮູ້ກ່ຽວກັບປະເພນີອາຫານທີ່ແຕກຕ່າງກັນ</p>
Experiential Learning	<p>Learning by doing, hands-on activities</p> <p>ຮຽນເຮັດຕົວຈິງ ແລະ ເຮັດກິດຈະກຳທີ່ໃຊ້ມືໃນການປະຕິບັດ</p>

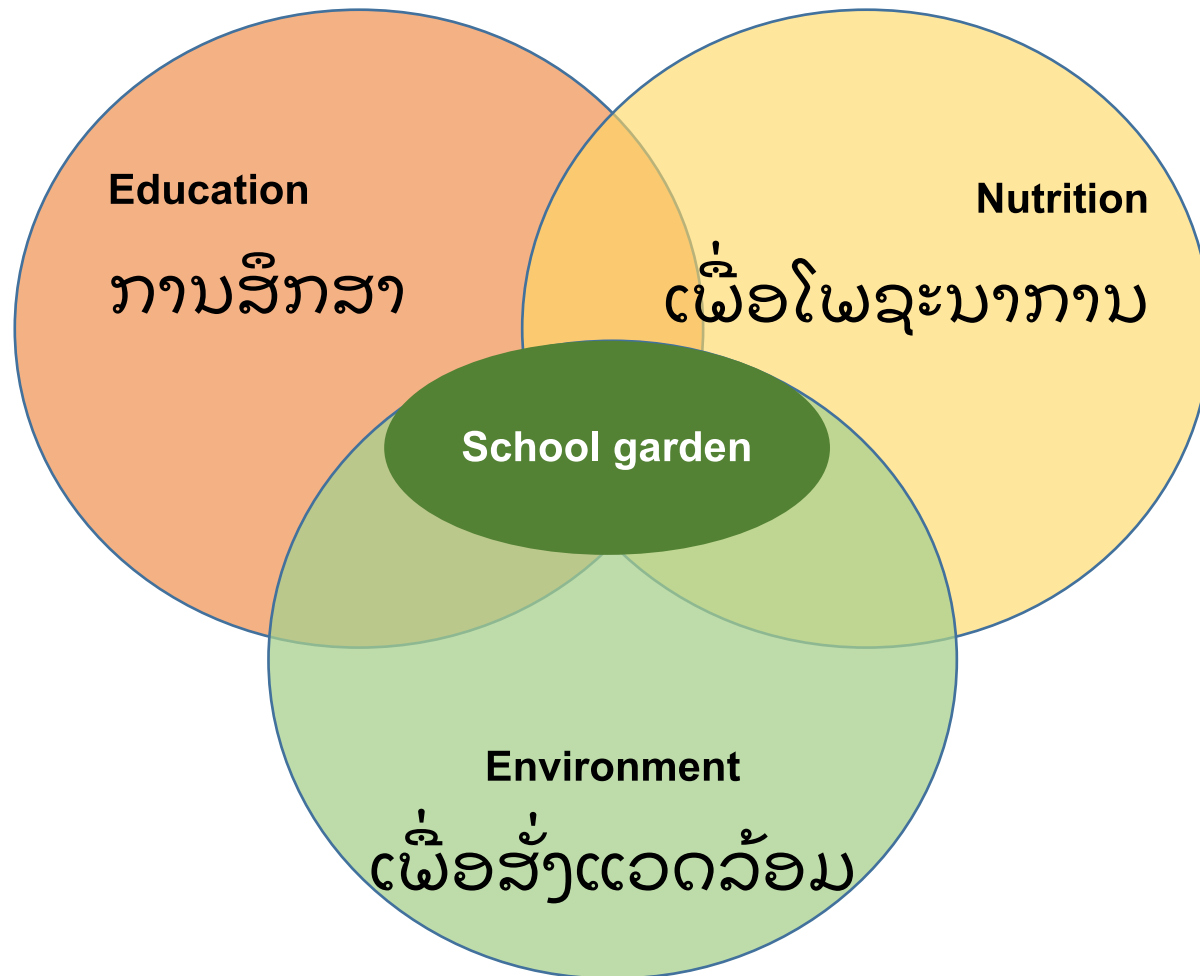
Pre-quiz

Questions	Possible answer	Correct Answer	Feedback
Q1: What are the benefits of school garden?	A. Education benefits B. Environmental benefits C. Nutritional benefits D. All above	D	School garden interventions aims to enhance different dimensions such educational, environmental and nutritional designs
Q2: How can school gardens promote environmental stewardship?	A. By teaching students about pesticides B. By encouraging the use of plastic containers C. By promoting the use of chemical fertilizers D. By teaching students about composting and water conservation	D	By teaching students about composting and water conservation
Q3. School children will enjoy eating their own products from school gardens?	A. True B. False	A. True	Because they will get sense of accomplishment from their own production



Lesson body

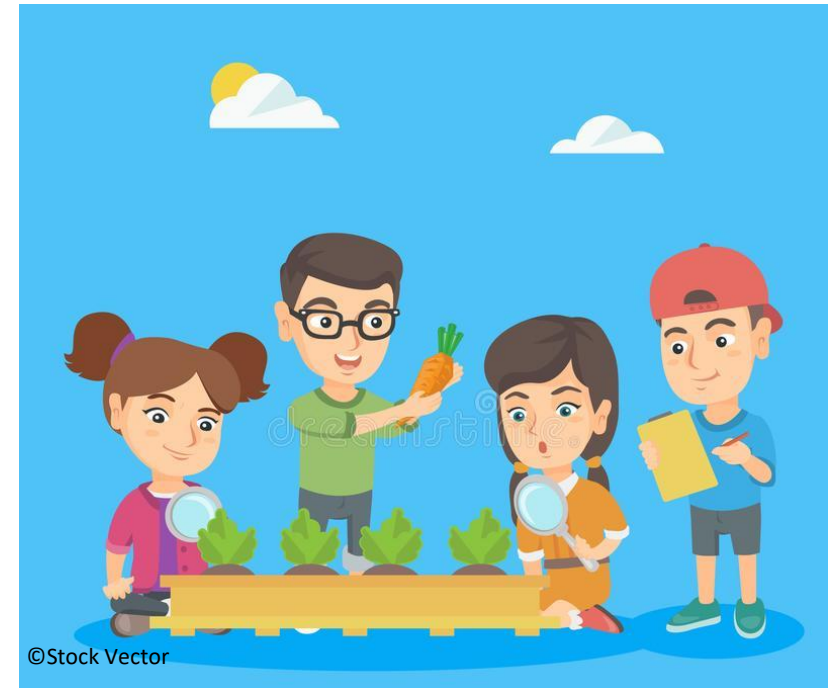
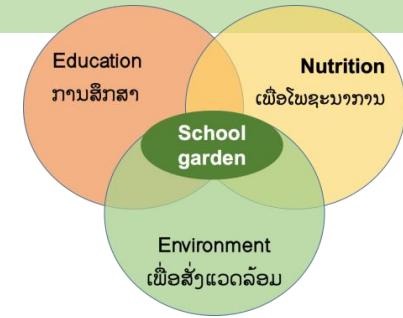
4. ຜົນປະໂຫຍດຂອງ ສວນໂຮງຮຽນ (Benefits of school garden)



4. Benefits of school garden ຜົນປະໂຫຍດຂອງສວນໂຮງຮຽນ

Education (ເພື່ອການສຶກສາ)

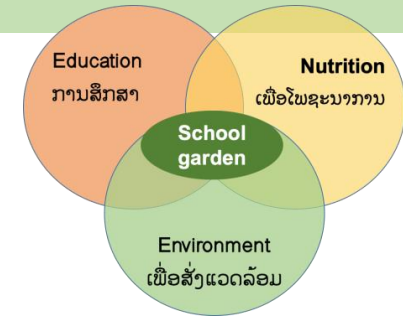
- Teaching about improved farming skills (ເຮັດການສິດສອນເພື່ອ ບົບບຸງທັດສະໃນການຜະລິດກະສິກໍາ)
- Teaching about nutrition and food (ສິດສອນກ່ຽວ ກັບໄພຊະນາການ ແລະ ອາຫານ)
- Helping the students to understand science, nature, and environment (ຫວັງວ່ານັກຮຽນຈະເຂົ້າໃຈກ່ຽວ ກັບວິທະຍາສາດ, ທຳມະຊາດ ແລະ ສິ່ງແວດລ້ອມ)
- Contribution to behavioral change related to food consumption (ມີການ ບ່ຽນແປງພຶດຕິກຳໃນການບໍລິໂພກອາຫານ)



4. Benefits of school garden ຜົນປະໂຫຍດຂອງສວນໂຮງຮຽນ

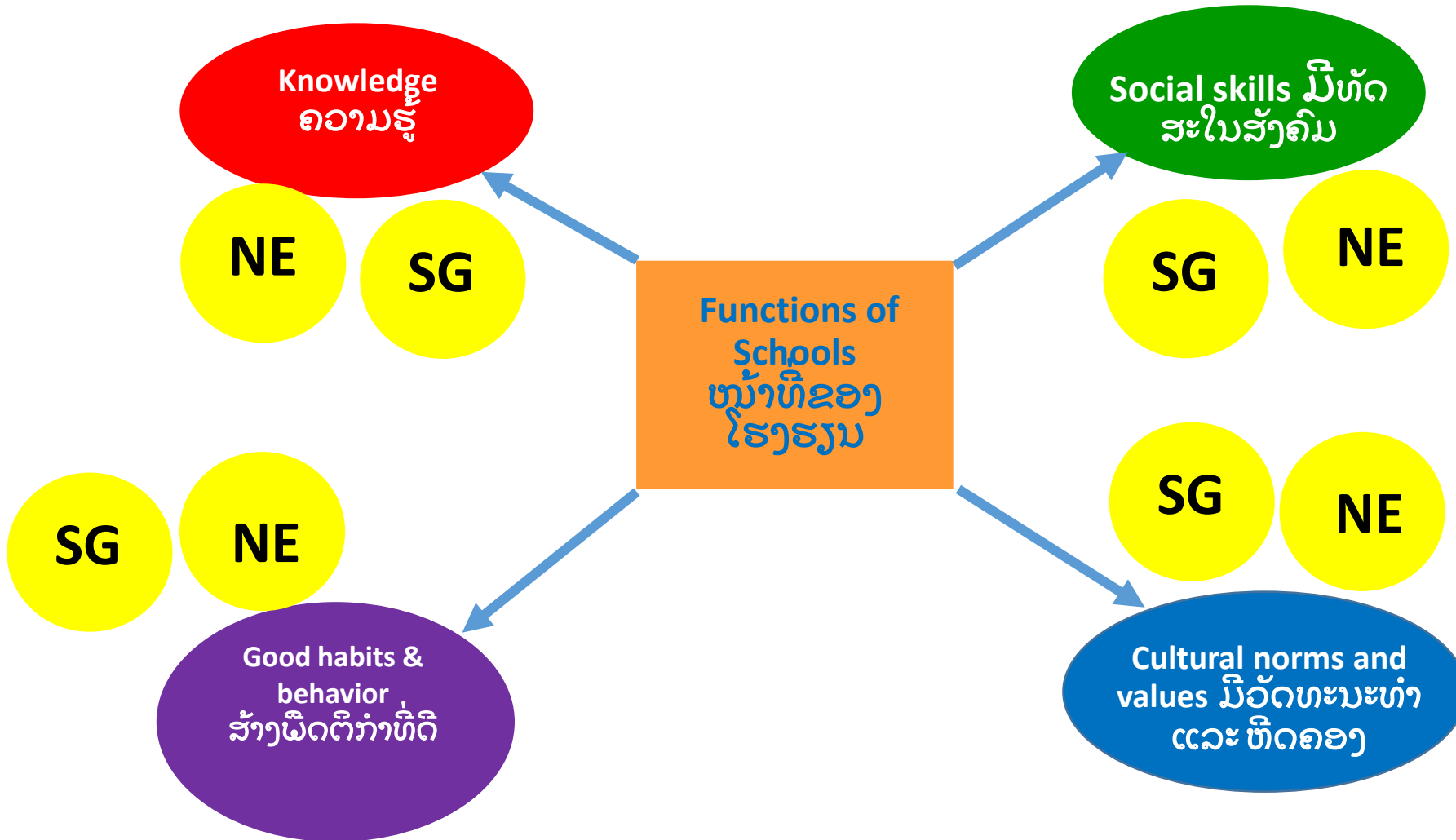
Nutrition (ໄດ້ໂພຊະນາການ)

- Improving nutrition, diets and health (ປັບປຸງໂພຊະນາການ, ການບໍລິໂພກ ແລະ ສຸຂະພາບ)
- Supplementing school feeding (ເພີ່ມວັດຖຸດິບໃນການອາຫານໂຮງຮຽນ)
- Supporting community food production (ສົ່ງເສີມຊຸມຊົນໃຫ້ຜະລິດອາຫານ)
- Enhancing diet diversity (ເພີ່ມອາຫານບໍລິໂພກອາຫານທີ່ຫຼາຍຫຼາຍ)
- Contributing to mental health and personal well-being (ສົ່ງເສີມໃຫ້ມີສຸຂະພາບຈິດທີ່ດີ ແລະ ຮ່າງກາຍທີ່ເຂັ້ມແຂງ)
- Uses a combination of educational strategies delivered through multiple venues (ໃຊ້ການປະສົມປະສານຂອງຍຸດທະສາດການສຶກສາທີ່ສົ່ງຜ່ານຫຼາຍສະຖານທີ່)
- Involves activities at the individual, community and policy levels (ມີສ່ວນຮ່ວມໃນກິດຈະກຳໃນລະດັບບຸກຄົນ, ຊຸມຊົນແລະນະໂຍບາຍ).



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4. Manifest Functions of School and Nutrition Education (NE) and school garden (SG) ຫນ້າທີ່ຂອງ ໂຮງຮຽນ ແລະ ການສຶກສາໂພຊະນາການ ແລະ ສວນໂຮງຮຽນ

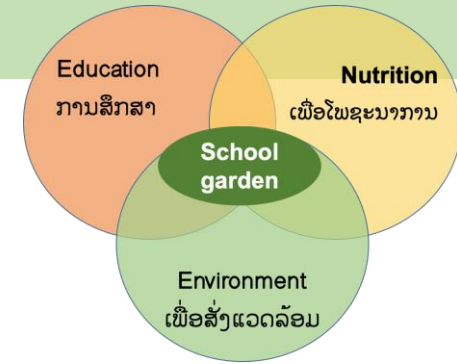


- Nutrition plays a critical role in the physical and cognitive development of school children
- (ໂພຊະນາການມີບົດບາດສຳຄັນໃນການພັດທະນາທາງດ້ານຮ່າງກາຍແລະມັນສະຫມອງຂອງເດັກນ້ອຍໃນໂຮງຮຽນ)
- To learn and perform well in school, students need to eat well & properly
- (ເພື່ອຮຽນຮູ້ແລະປະຕິບັດໄດ້ດີໃນໂຮງຮຽນ, ນັກຮຽນຕ້ອງກິນອາຫານທີ່ດີແລະຖືກຕ້ອງ)

4. Benefits of school garden

Environment (ຮັກສາສິ່ງແວດລ້ອມ)

- A platform for environmental education and knowledge exchange (ເວທີການສຶກສາສິ່ງແວດລ້ອມ ແລະ ແລກປ່ຽນຄວາມຮູ້)
- Increasing climate change awareness (ເພີ່ມທະວີຄວາມຮັບຮູ້ກ່ຽວກັບການປ່ຽນແປງຂອງດິນຟ້າອາກາດ)
- Enhancing and conserving local agro-biodiversity and agro-ecology (ເສີມຂະຫຍາຍ ແລະ ອະນຸລັກຊີວະນາໆພັນ ແລະ ນິເວດກະສິກໍາ)
- Creating low-input agricultural system (ສ້າງລະບົບກະສິກໍາທີ່ລົງທຶນຕໍ່າ)



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4. Benefits of school garden



Seed saving practices in the Philippines (ການເກັບຮັກສາແນວພັນ ໃນປະເທດ ຟີລິບິນ)

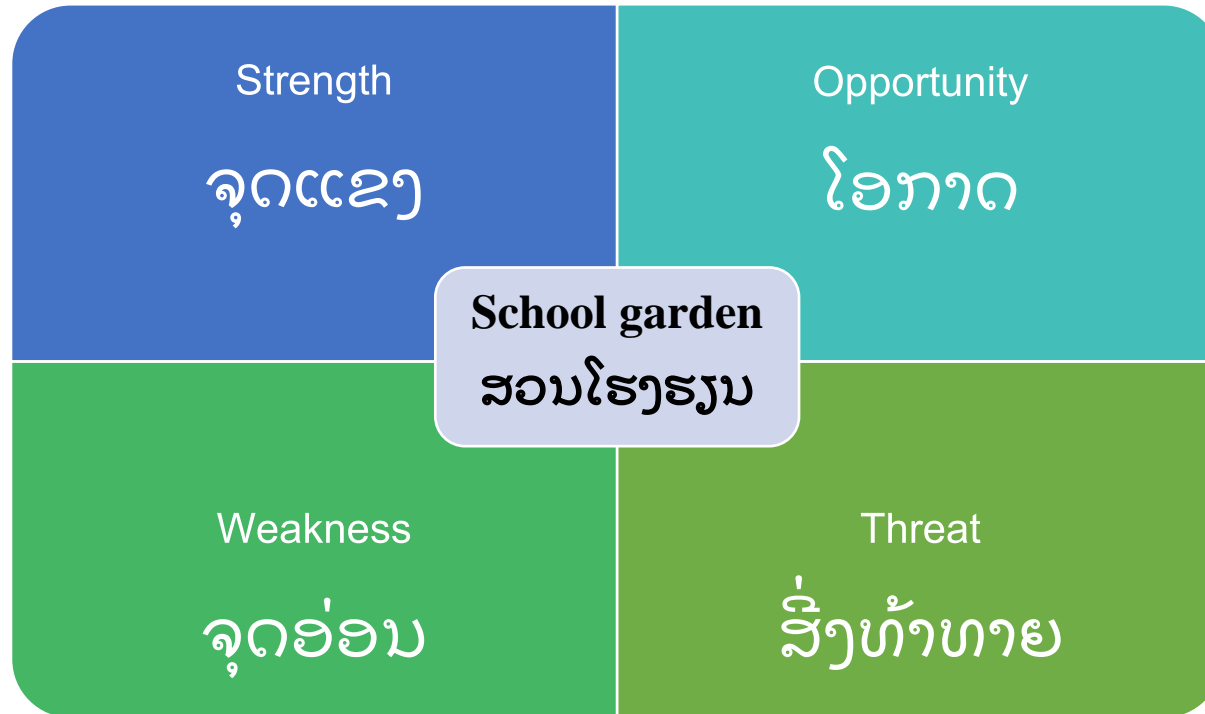
4. Benefits of school garden



Crop museum (ទ្រព្យធានាវិទ្យាស្ថាន)

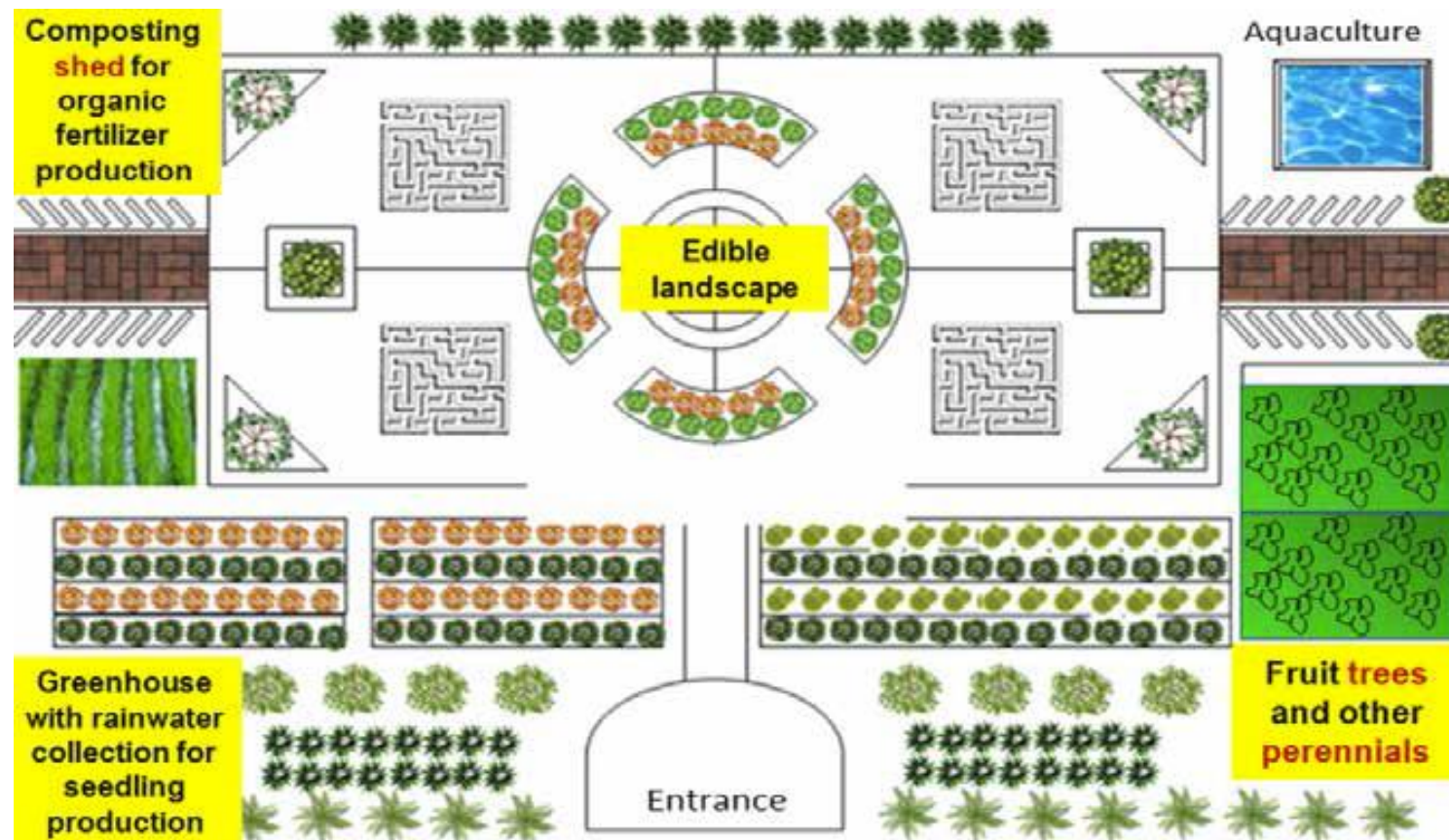
5. Setting up a school garden (ການສ້າງຕັ້ງສວນໂຮງຮຽນ)

- **Step 1** Conducting participatory school garden planning workshop (ຈັດກອງປະຊຸມສຳມະນາການວາງແຜນສວນຂອງໂຮງຮຽນແບບມີສ່ວນຮ່ວມ)



5. Setting up a school garden (ການສ້າງຕັ້ງສວນໂຮງຮຽນ)

- **Step 2** Providing garden structure, tools, and initial inputs (ຈັດສະຖານທີ່ສວນ, ເວົ້າເຄື່ອງມື, ອຸປະກອນ ແລະ ສິ່ງທີ່ຈຳເປັນໃນການເຮັດສວນໃຫ້ໂຮງຮຽນ)



6. Application of school garden in nutrition education

(ການນຳໃຊ້ສວນໂຮງຮຽນໃນການສຶກສາໂພຊະນາການ)

- Teaching the students how importance that plants is as food source and how they are produced and harvest. Fish and frog demonstration as Animal proteins can be introduced (ສອນໃຫ້ນັກຮຽນຮູ້ເຖິງຄວາມສຳຄັນຂອງພືດເປັນແຫຼ່ງອາຫານ ແລະ ວິທີການຜະລິດ ແລະ ເກັບກ່ຽວ. ການລ້ຽງ ປາ ແລະ ກົບ ສາມາດມາດ ເພີ່ມທາດຊີນໄດ້).



6. Application of school garden in nutrition education

- Teaching students about plants and nutrient content (ການສອນນັກຮຽນກ່ຽວກັບພືດ ແລະ ທາດອາຫານທີ່ສຳຄັນໃນພືດ)



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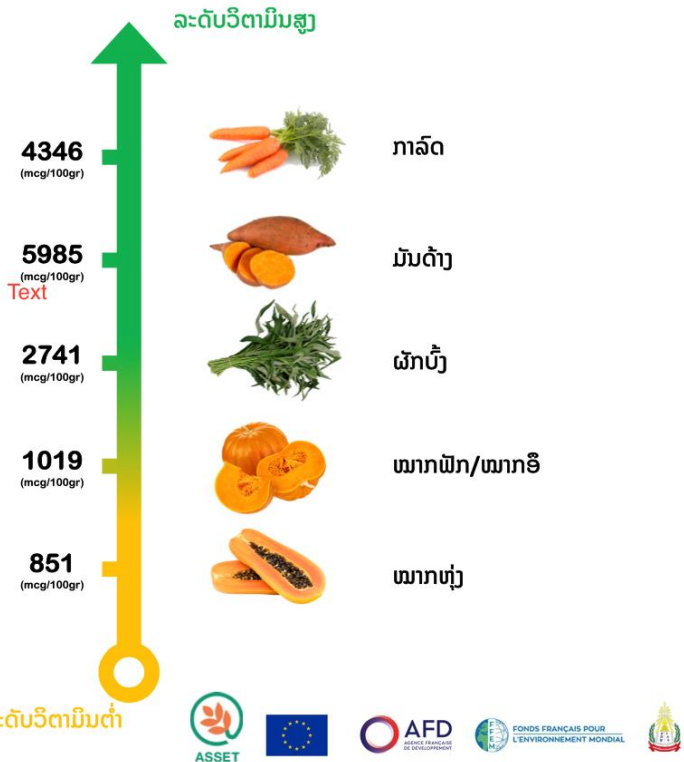
ທົດສອບຄວາມຮູ້ເລື່ອງອາຫານ ແລະ ພືດພື້ນບ້ານ (ASSET, 2023)

6. ການນຳໃຊ້ສ່ວນໂຮງຮຽນໃນການສຶກສາໄພຊະນາການ

ພວກເຮົາຈະປຸກພືດທີ່ມີສານອາຫານຫຼາຍໄດ້ແນວໃດ?

ພືດທີ່ມີວິຕາມິນ ເອ

ວິຕາມິນ ເອ ສຳຄັນຕໍ່ສາຍຕາ ແລະ ຊ່ວຍຕໍ່ສູ້ອາການເຈັບປ່ວຍ



ພວກເຮົາຈະປຸກພືດທີ່ມີສານອາຫານຫຼາຍໄດ້ແນວໃດ?

ພືດທີ່ມີທາດເຫຼັກ

ທາດເຫຼັກຊ່ວຍປັບສະພາບເສຍອົດ ແລະ ປ້ອງກັນພະຍາດເລືອດອາໄສອົດ ພ້ອມທັງຊ່ວຍໃຫ້ສະໜອງຮາກໄດ້ດີຂຶ້ນ



ພວກເຮົາຈະປຸກພືດທີ່ມີສານອາຫານຫຼາຍໄດ້ແນວໃດ?

ພືດທີ່ມີທາດສັງກະສີ

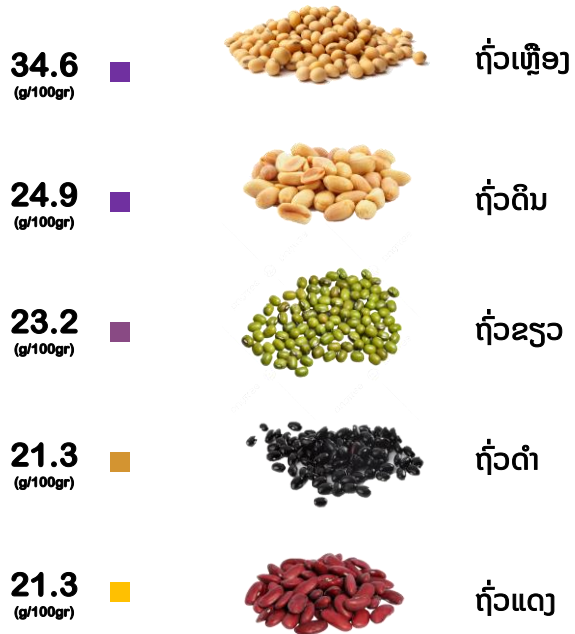
ທາດສັງກະສີຊ່ວຍປັບສະພາບເສຍອົດ ແລະ ຕ້ອງກັບອາການເຈັບປ່ວຍ ພ້ອມທັງຊ່ວຍໃຫ້ສະໜອງຮາກໄດ້ດີຂຶ້ນ



ພືດທີ່ມີທາດໂປຣຕິນ

ໂປຣຕິນສຳຄັນຕໍ່ການສ້າງກ້າມຜູ້ ແລະ ການພັດທະນາຂອງສະໜອງ

ລະດັບໂປຣຕິນສູງ



ອະທິບາຍ

1. ເລືອກຫຍັງເປັນໂປຣຕິນສູງ?
2. ເພື່ອຫຍັງຈຶ່ງຈຳເປັນຕ້ອງໃຫ້ລະດັບສູງໃນການປຸງເມັດ?
3. ຈາກຮູບທີ່ນັ້ນ, ເພື່ອເມັດໃດທີ່ມີປະໂຫຍດສູງ?
4. ສານອາຫານທີ່ມີປະໂຫຍດແນວໃດທີ່ຊ່ວຍເຮັດໃຫ້ເຮົາເຂັ້ມ, ເພື່ອຖືກໃຫ້ ແລະ ເດີນທາງອ້ອມ?
5. ເລືອກເພື່ອໃດກ່ຽວກັບການປຸງເມັດທີ່ມີສິ່ງອາຫານ?

ພວກເຮົາຍັງສາມາດຮັບສານອາຫານຈາກຊີ້ນສັດ

ພວກເຮົາສາມາດຫາໂປຣຕິນໃນປະລິມານຫຼາຍໄດ້ຈາກເຂົ້າໜົມ ແລະ ຊີ້ນສັດຕ່າງໆ. ແຕ່ບາງຄັ້ງ ກໍ່ມີການຍາກທີ່ຈະເຂົ້າໄປຫາໂປຣຕິນທີ່ມີອັນມາດຕະຖານ ເຊັ່ນສານໂປຣຕິນທີ່ ເຫມາະສຳລັບການບໍລິໂພກຕາມຖືກຕ້ອງ ເຊັ່ນ: ຖືກຫຸ້ມ ຖືກນົມ ເຊັ່ນນີ້.

ວິຕາມິນ ເອ			
ທາດເຫຼັກ			
ທາດສັງກະສີ			

Application of school garden in nutrition education

- Teaching students about cooking and processing of harvested produces from school garden (ສອນນັກຮຽນໃຫ້ຮູ້ການແຕ່ງກິນ ແລະ ແປຮູບ ຜະລິດຕະພັນທີ່ເກັບກ່ຽວ ຈາກສວນໂຮງຮຽນ)



Application of school garden in nutrition education

- Developing agri-business entrepreneurship for students to promote vegetable production and consumption (ພັດທະນາແບບນັກທຸລະກິດກະເສດໃຫ້ແກ່ນັກຮຽນ ເພື່ອໃຫ້ເຂົາເຈົ້າເຮັດການຜະລິດ ແລະ ການບໍລິໂພກ)





Post-learning activities

Summary and conclusion (ສັງລວມ ແລະ ສະຫຼຸບ)

- The applications of school gardens for nutrition education are specific to school and how they are integrated into the curriculum ການນຳໃຊ້ສວນໂຮງຮຽນເພື່ອສອນເລື່ອງໂພຊະນາການແມ່ນຕ້ອງປັບເຂົ້າແຕ່ລະໂຮງຮຽນ ແລະ ເຮັດແນວໄດໃຫ້ສາມາດເອົາເຂົ້າໃນຫຼັກສູດການຮຽນການສອນ.
- **School gardens offer a unique and engaging platform for students to learn about nutrition, environmental stewardship, and healthy living.** By incorporating hands-on activities like planting, tending, and harvesting, students gain a deeper understanding of where their food comes from and the importance of making healthy choices
- ສວນຂອງໂຮງຮຽນມີທີ່ເປັນເອກະລັກ ແລະ ມີສ່ວນຮ່ວມສຳລັບນັກຮຽນທີ່ຈະຮຽນຮູ້ກ່ຽວກັບໂພຊະນາການ, ການເບິ່ງແຍງສິ່ງແວດລ້ອມ, ແລະ ການດຳລົງຊີວິດທີ່ມີສຸຂະພາບດີ. ໂດຍການລວມເອົາກິດຈະກຳຕົວຈິງ ເຊັ່ນ: ການບູກ, ການລ້ຽງ, ແລະ ການເກັບກ່ຽວ, ນັກຮຽນໄດ້ຮັບຄວາມເຂົ້າໃຈຢ່າງເລິກເຊິ່ງວ່າອາຫານຂອງເຂົາເຈົ້າມາຈາກໃສ ແລະ ຄວາມສຳຄັນຂອງການເລືອກທີ່ດີຕໍ່ສຸຂະພາບ

Post quiz (test)

- This quiz is used to test the knowledge of students related to this lessons that they just finished learning. You can add 5-10 questions. Types of questions could be: MCQ, True or False, Matching, Fill in short words.

Questions	Possible answer	Correct Answer	Feedback
Q1: Why do we need school garden to promote nutrition?	A. School garden can be educational tools B. School garden provide good environment to learn C. School garden can provide nutrition for kids D. All corrects.	D	School garden is integrated approach which include nutrition, education and environment to improve knowledge, attitude and practice of nutrition for kids and adults
Q2: Child malnutrition is only thinness in children.	A. True B. False	False	There are many forms of malnutrition such as low or high nutritional status while micronutrient deficiency is another challenge.
Q3: Child malnutrition include wasting, underweight, stunting and overweight.	A. True B. False	True	In rural areas. Malnutrition of children showed in stunting, wasting and underweight while in urban and semi-urban areas, child overweight was increased
Q4: What is the consequences of malnutrition?	A. Inability to concentrate in school B. Lack of skill or low literacy C. Weak resistance and early death D. all corrects	D	Malnutrition is vicious circle of poverty and lead to low ability socio-economic adaptation and productivity

Assignment/Homework/Case study

Assignment

- Project team: create 4 teams (5-6 students/team) per group A, B, C, D
- Students needs to provide the ideas generation and selection of an school garden to produce foods in the context of their home town.

Reference

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Next lesson

- *This is the end of the lesson.*
- *Ending message and introduction to next lesson including lesson title and topics should be given.*

Next Lesson Title	Next lesson Lesson 3: Nutrition education and microlearning
	I. Introduction of Nutrition for Adolescent
	II. Major components of Nutrients
	III. Factor influencing Nutritional status for adolescent
	IV. How to balance Diet for Adolescent